Well Records for Artificial Penetration #16

Cheney Ranch #15X

(API No. 1921446)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES

REPORT OF WELL PLUGGING AND ABANDONMENT

J. W. Covello, Agent
CENCAL OIL COMPANY, INC.
1701 Westwind Drive
Bakersfield, CA 93301

Coalinga, California
July 20, 1995

Your report of plugging and abandonment of well **"Cheney Ranch" 15X**, A.P.I. No. **019-21446**, Section **29**, T. **14 S**, R. **13 E**, M.D.B. & M., **Cheney Ranch Gas** field, **Fresno** County, dated **May 8, 1995**, received **May 17, 1995**, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and the filing of well records.

NOTES: 1. Surface plugging completed on December 29, 1994.

2. Site inspection made and approved **June 15, 1995.**

RH/kt

cc: Well File

WILLIAM F. GUERARD, JR.
STATE OIL AND GAS SUPERVISOR

By _____
(for) RICHARD F. CURTIN
DEPUTY SUPERVISOR

OG159

DIVISION OF OIL, GAS & GEOTHERMAL RESO ES

CHECK LIST - RECORDS RECEIVED AND WELL STATUS

Company CENCAL DRILLING, INC., OPERATOR Well No. "CHENEY RANCH" 15X

API No. 019-21446 Sec. 29, T. 14 S., R. 13 E., M.D.B.&M.

Field CHENEY RANCH GAS County FRESNO

Oil		Water disposal		Completed	
Gas	✓	Waterflood		Recompleted	
Gas-Open to Oil Zone		Steamflood		Idle	
Drilling		Fire Flood		Abandoned	✓
Dry Hole		Air Injection		Abandoned BLM	(date)
Gas Storage		Gas Injection			
Observation		CO_2 Injection		POOL Abd	
Waterflood Source		LPG Injection			

ENGINEER'S CHECK LIST

1. Summary, History, Core & Sidewall Records ✓
2. Electric Logs ✓
3. Operator's Name ✓
4. Signature ✓
5. Well Designation ✓
6. Location ✓
7. Elevation ✓
8. Notices ✓
9. "T" Reports ✓
10. Casing Record ✓
11. Plugs ✓
12. Surface Inspection SH RH 6/15/95
13. Production
14. Directional Survey

CLERICAL CHECK LIST

1. Form OGD121 ✓
2. Form OGD159(Final Letter) ✓
3. Form OGD159(Final Letter-BLM)
4. Form OGD150B (Release of Bond)
5. P.I ✓
6. EDP

Abandon Pool/Type ___/___

Date ___/___/___

(Conversions Only)

R-5-17
D-5-8
S-12-29-94
L-6-15-95

Electric Logs

RECORDS COMPLETE RH 5/26/95

APPROVED RH 6/16/95

NOT APPROVED

Reason:

Return to: dwd

RELEASE BOND no Bond

Date Eligible

(Use date last needed records were received)

MAP AND MAP BOOK W5-2 RH 6/16/95 SW/4

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

CenCal Drilling, Inc.

Operator Cen Cal Drilling, Inc. Field Cheney Ranch (Cheney Ranch Gas) County Fresno
Well Chaney Ranch 15x, Sec. 29, T 14s, R 13e, MD B. & M.
A.P.I. No. 019-21446 Name Clofas W. Case (Person submitting report) Title (President, Secretary or Agent)
Date May 8, 1995

Signature Clofas W. Case

7010 W. Cerini Riverdale, CA 93656
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11-3-94	M.I.R.U.
11-4-94	Rigged up to lay rods down. Unseated pump. Closed well in.
11-5-94	Laid 234 3/4" rods down in singles. Closed well in. Laid Rig Down
11-10-94	M.I.R.U.
11-11-94	Removed xmas tree. Installed B.O.P. Pulled & laid down tbg. R.I.H. tbg. stopped @ 7265'. Rigged up circ. down could not get below 7300'
11-12-94	Rigged up foam air to cement zone. Laid plug from 7300' to 6920' W.O.C. Tag top of cement 6920' witnessed by D.O.G. approved. Pumped 80 bbls. mud down tbg. witness & approved by D.O.G. Rigged up & laid down 166 jts. 2 3/8" tbg. Rigged up foam air w/ tbg. tail @ 1595' pumped & displaced 16 sacks of class G cement pulled up stds. Closed well in.
11-17-94	Cond. mud lowered tbg tagged top of cement @ 1385' witness by D.O.G. & approved. Mud checked & approved by D.O.G. changed well over to mud w/tail @ 1385' laid tbg. down in singles Removed B.O.P. tore out & loaded up equipment. Laid rig down.
12-19-94	Mixed & poured cement & filled casing & surface pipe 30' - 5' cut off csg. 6' below surface. Used 8 sacks of cement.

RECEIVED
MAY 1 7 1995
DIVISION OF OIL & GAS
COALINGA

OG103 (2/92/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
(209)-935-2941

No.T 595- 5

REPORT ON OPERATIONS

Kurt E. Sickles
CENCAL DRILLING, INC
P O BOX 11006
Bakersfield CA 93309

Coalinga, California
January 3, 1995

Your operations at well "Cheney Ranch" 15X API No. 019-21446,
Sec. 29, T. 14 S., R. 13 E., M.D.B.&M., Cheney Ranch Gas Field,
in Fresno County were witnessed on December 29, 1994.
G. Philbrick, representative of the supervisor, was present
from 1010 to 1015. There were also present Clofas Case w/C. Case Co..

Present condition of well: 9 5/8" cem. 770'; 4 1/2" cem. 7300', cp at 7257' & 1927', perf. 7226'-7216' & 7192'-7172' WSO. TD. 7300'; plugged w/cem. 7300'-6920', 1585'-1385' & 30'-5'.

The operations were performed for the purpose of abandonment.

DECISION: THE PLUGGING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED.

DEFICIENCIES: None

CONTRACTOR: C. Case Co.

GP/kt

WILLIAM F. GUERARD, JR.
STATE OIL AND GAS SUPERVISOR
By Richard F. Curtin
RICHARD F. CURTIN
Deputy Supervisor

OG109

lfk

5

DIVISION OF OIL AND GAS
Cementing/Plugging Memo

Operator Concat Drilling, Inc. Well No. "Cheney Ranch" 15X
API No. 019-21446 Sec. 29, T. 14S, R. 13E, MD B&M
Field Cheney Ranch, County Fresno. On 12/29/94
(Mr.)/Ms Gary Patterick, representative of the supervisor, was present from 1010 to 1015.
There were also present Mr. Clofas Case w/ C. Case Co.
Casing record of well: 9 5/8" Cem 270; 4½" Cem 7300, cp@7257 & 1927, Perf 7226-7216 & 7192-7172 WSO, TD 7300, Plugged w/Cem 7300-6920, 1595-1385 & 30-5.

The operations were performed for the purpose of abandonment

☒ The plugging/cementing operations as witnessed and reported are approved.
☐ The location and hardness of the cement plug @ _____' is approved.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____:

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Casing/tubing recovered: _____" shot/cut at _____', _____', _____' pulled fr. _____';
_____" shot/cut at _____', _____', _____' pulled fr. _____'.
Junk (in hole): _____
Hole fluid (bailed to) at _____'. Witnessed by _____

Mudding	Date	Bbls.	Displaced	Poured	Fill	Engr.
68 #/cf	11/12	80 bbls	tbg 6900		1500	Haude
68 #/cf	11/12	25 bbls	tbg 1500		Sfc	Haude

c/o 7300' 11/12/94 Rptd by Clofas Case

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
11/12	36 cf	tbg 7300	Rptd by	C. Case	6920	2000 # tbg weight	11/12 1430	Haude
11/13	16 Sx	Tbg @ 1585	Rptd by	C. Case	1385	2000# Tbg	11/17/94 926	JP
12/29	5 Sx	Dumpcrete surf	"	"	5'	Visual	12/29/94 1045	JP

OGD10 (9/91/GSR1/5M)

Contractor: C. Case Company

Deficiencies: None

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES

No. P593-419
Field Code 134
Area Code 00
New Pool Code abd
Old Pool Code 05

PERMIT TO CONDUCT WELL OPERATIONS

Kurt E. Sickles
CENCAL DRILLING, INC
P O BOX 11006
Bakersfield CA 93309

Coalinga, California
December 10, 1993

Your proposal to abandon well "Cheney Ranch" 15X, A.P.I. No. 019-21446, Section 29, T. 14 S, R. 13 E, M.D.B. & M., Cheney Ranch field, ------- area, U. cretaceous pool, Fresno County, dated 12/6/93, received 12/8/93 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED.

1. Adequate blowout prevention equipment shall be installed and maintained in operating condition at all times.

2. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72 lbs./cu. ft. and minimum gel-shear strength (10 min.) of 20 lbs./100 sq. ft.

3. The surface plug is placed from at least 30' below surface.

4. THIS DIVISION SHALL BE NOTIFIED:

   a. TO WITNESS the location and hardness of the cement plug from 7300' to 7070'.

   b. TO WITNESS the mudding of the well.

   c. TO WITNESS the location and hardness of the cement plug from 1600' to 1500'.

   d. TO WITNESS the location and hardness of the surface plug after the casing has been cut 5' below ground.

   e. When the well site has been restored to a condition that will pass environmental inspection.

Blanket Bond
GWM/jp

Engineer Glenn Muggelberg

Phone (209) 935-2941

Sfd if env ok
Hawde 6/16/95

WILLIAM F. GUERARD, JR.
STATE OIL AND SUPERVISOR

By Richard F. Curtin
RICHARD F. CURTIN
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Abandon Well

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS OGD11A	FORMS OGD121
	0	/	

DIVISION OF OIL AND GAS

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon well Chevey Ranch 15X, API No. 019-21446

Sec. 29, T. 14S, R. 13E, MD B. & M., Chavey Ranch Field, Fresno County.

commencing work on January, 19 94

The present condition of the well is:

1. Total depth 7300

2. Complete casing record, including plugs and perforations (present hole)

See attached Detail

3. Last produced ? (Date) (Oil, B/D) (Gas, Mcf/D) (Water, B/D)

or

4. Last injected (Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure)

Additional data for dry hole (show depths):

5. Oil or gas shows

6. Stratigraphic markers

7. Formation and age at total depth

8. Base of fresh water sands 1600'

9. Is this a critical well according to the definition on the reverse side of this form? ☐ Yes ☒ No

The proposed work is as follows:

1) C/O to 7300' Equilize Plug #1 7300-7070

2) Mud up hole w/70#/cf mud Equilize Plug #2 1600'-1500'

3) Plug #3 25'-Surface - cut off csg @ 5' below ground weld on metal cap.

RECEIVED
DEC 0 8 1993
DIVISION OF OIL & GAS
COALINGA

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 1400 Easton Dr #135A (Street)
Bakersfield (City) Ca (State) 93309 (Zip)
Telephone Number (805) 3236005 (Area Code) (Number)

Crucal Orlg Inc. (Name of Operator)
By Kurt Sickles (Print Name)
Kurt Sickles (Signature) 12/6/93 (Date)

OG108 (8/87/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

MAR 19 1982

DIVISION OF OIL & GAS
COALINGA

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

Operator CenCal Drilling Inc. Operator, Well No. 15-x 29 "Cheney Ranch", API No. 019-21486

Sec. 29, T. 14S, R. 13E, MD B. & M., Cheney Ranch Gas Field, Fresno County.

Location 530' S & 530 E from W¼ COR Sec 29, T14SR13E
(Give surface location from property or section corner, or other center line and/or landmark coordinates)

Elevation of ground above sea level [illegible] feet.

All depth measurements taken from top of Kelly Bushing which is 11 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date 12/12/82

Signed [signature]

(Engineer or Geologist)

Title Operator

Commenced drilling 7-12-81

Completed drilling 11-19-81

Total depth (1st hole) 7300 (2nd) (3rd)

Present effective depth 7292

Junk None

GEOLOGICAL MARKERS	DEPTH
BASE MIOCENE	3503
TOP Eocene sand	4875
TOP Cretaceous	5920
TOP Cheney Ranch Sand	6930

Commenced producing (Date) Flowing/gas lift/pumping (Cross out unnecessary words)

Formation and age at total depth Maestrian-Cretaceous

Name of producing zone Cheney Ranch Sand

	Gross Oil bbl. per day	Gravity Gross Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	38D	60	.10	80	650	850
Production after 30 days	38D	60	.10	80	650	850

CASING RECORD (Present Hole)

Size of Casing (O.D.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Top of Cement if Through Perforations
5/8	770	0		K-55 BRT&C and STEC		12 ¼	293	
½	7300	0	11.6	K-55	New	7 7/8	400	7257
					Stage Collar		540	1927

PERFORATED CASING
(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

Two .26" holes per foot 7216 - 7226 tubing gun. Reshot

two 1/2" holes per foot 7216 - 7226 with casing gun.

Shot two .26" holes per foot 7272 - 7292.

RECEIVED
DEC 08 1993
DIVISION OF OIL & GAS
COALINGA

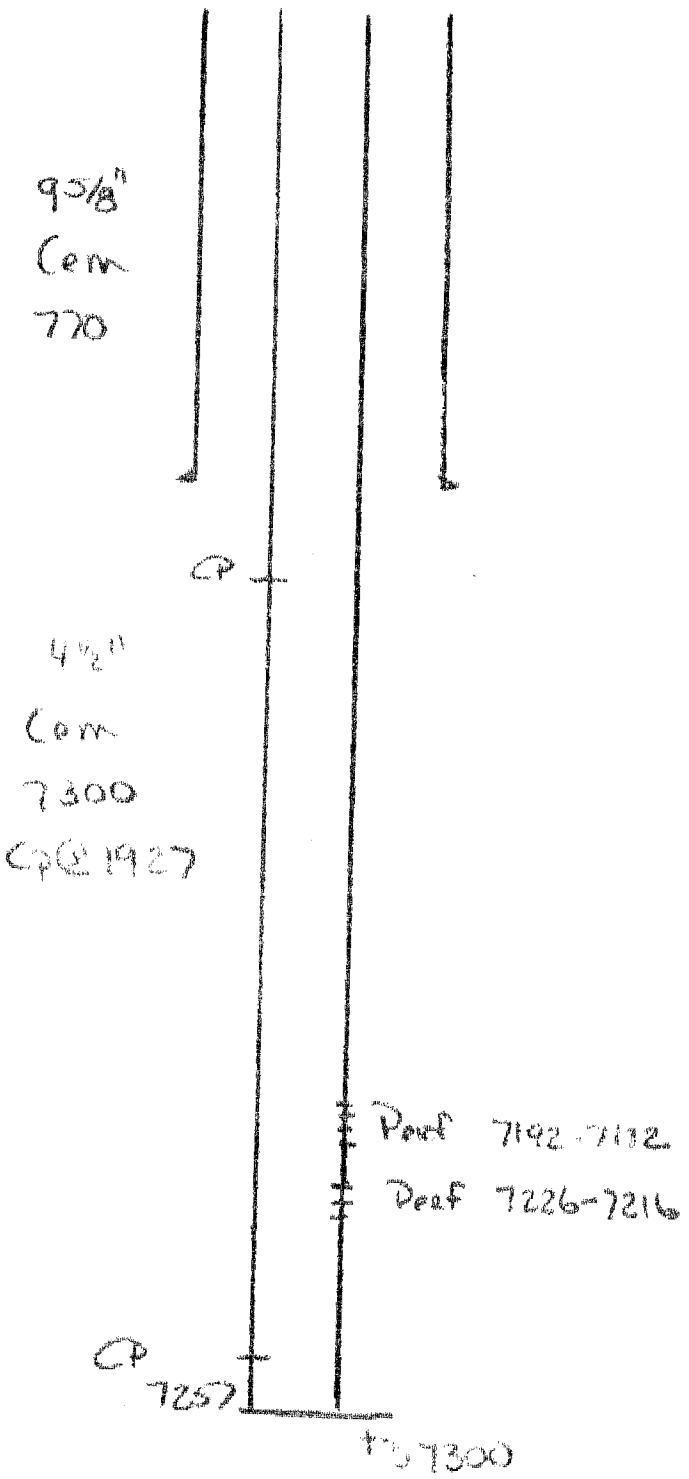
as the well directionally drilled? No If yes, show coordinates at total depth

ectrical log depths 7288 Other surveys

100 (1-76-6SM-5M)

ATTACH ONE COPY OF EACH LOG AND SURVEY

"Chaney Ranch" 15X (019-21446)



RECEIVED
DEC 0 8 1993
DIVISION OF OIL & GAS
COALINGA

STATE OF CALIFORNIA—THE RESOURCES AGENCY PETE WILSON, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
466 NORTH FIFTH STREET
COALINGA, CALIFORNIA 93210-1793
(209) 935-2941
TELEFAX (209) 935-5154

April 3, 1995

Kurt E. Sickles, Agent
CENCAL DRILLING, INC.
P.O. Box 11006
Bakersfield, CA 93309

Subject: Past Due Records

The California Division of Oil, Gas & Geothermal Resources sent three Notice of Records Due all dated March 1, 1995, (copies enclosed) pertaining to wells "Silver Creek" 14X, (019-20712), "Cheney Ranch" 15X, (019-21446) and "Silver Creek" 27X, (019-20726) all in Sec. 29, T. 14 S., R. 13 E., in the Cheney Ranch field, that you have not filed with the Division as required by Division 3 of the Public Resources Code.

Failure to file these records is a violation of law punishable by a substantial civil penalty as provided by Section 3235.5 of the Public Resources Code.

Unless all records listed in the enclosed Notice of Records Due are received in this office by May 1, 1995, the Division will begin proceedings for the imposition of appropriate civil penalties.

Sincerely

Kathie Jaramillo

(FOR) Richard F. Curtin
District Deputy

[illegible]

RFC/kt

Enclosure

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES

NOTICE OF RECORDS DUE

March 1, 1995

P593-419

Kurt E. Sickles, Agent
CENCAL DRILLING, INC.
P.O. Box 11006
Bakersfield, CA 93309

Dear Mr. Sickles:

In accordance with Division 3 of the Public Resources Code of California, the following record is due, covering the Abandonment Notice dated December 6, 1993, of your well "Cheney Ranch" 15X, API 019-21446, Cheney Ranch Field, Fresno County. Section 29, T. 14 S., R. 13 E., M.D.B. & M.

RECORDS: Records are due with 60 days after completion, suspension, or abandonment of any well, or upon completion of additional work in any well. **Records shall be submitted in duplicate.** Division forms must be signed in the spaces provided.

OIL AND GAS OPERATION

XXX History (Form OG 103)

The surface plug for this well was Witnessed and Approved on December 29, 1994.

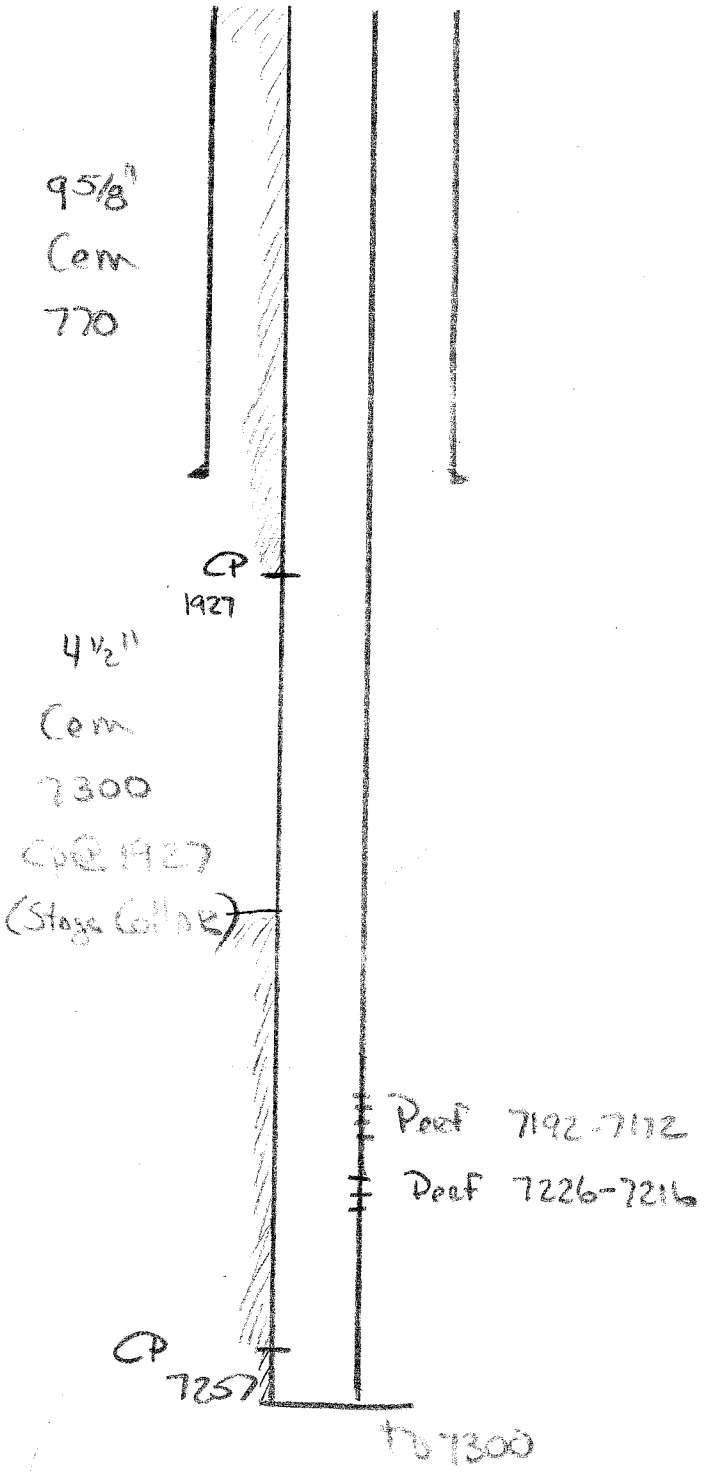
Roy L. Haude

Roy J. Haude

ENERGY & MINERAL RESOURCE ENGINEER
(209) 935-2941

OG170

"Chaney Ranch" 15X (019-21446)



7 7/8" hole from 770-7300
Cem 4 1/2" Csg w/400 cf @ 7257
and w/ Stage Collar @ 1927 w/
540 cf

4 1/2" Csg K55 11.6# in 7 7/8" hole = 4.389 LF/cf

4.389 LF/cf x 400cf = 1755 LF
CP @ 7257 - 1755 = 5501 TOC

4.389 LF/cf x 540cf = 2370 LF
Returns to Surface via Wall Hooking
ON 9 5/8" Csg

No Perf & Sqz Necessary

* Field
Cheney Ranch Gas

Operator
Cencal Drilling, Inc.

*

Sec	Twn	Rge	Well	Type	Status
29	14S	13E	"Cheney Ranch" 15X	DG	IDLE-5

API #
019-21446

Location
Fr W/4 cor 530 S 530 E

Elevation	BFW
375' KB	1600

Lambert N/S Lambert E/W Grid Map status
IDLE-GAS

Casing history
9-5/8" cem 770'; 4-1/2" cem 7300', cp 1927', [redacted], perf 7226'-7216' & 7192'-7172'WSO. TD 7300'.

F3 to locate API #, F2 to exit, Esc to undo

DIVISION OF OIL AND GAS

CHECK LIST - RECORDS RECEIVED AND WELL STATUS

Company Cenaal Drilling Well No. 15X

API No. 019-21466 Sec. 29 , T. 14S , R. 13E , ______ B.&M.

County ______ Field ______

RECORDS RECEIVED **DATE**

Well Summary (Form OG100) ______
History (Form OG103) ______
Core Record (Form OG101) ______
Directional Survey ______
Sidewall Samples ______
Other ______
Date final records received ______
Electric logs: ______

STATUS

Producing - Oil	___	Water Disposal	___
Idle - Oil	___	Water Flood	___
Abandoned - Oil	___	Steam Flood	___
Drilling - Idle	___	Fire Flood	___
Abandoned - Dry Hole	___	Air Injection	___
Producing - Gas	✓	Gas Injection	___
Idle - Gas	___	CO_2 Injection	___
Abandoned - Gas	___	LPG Injection	___
Gas-Open to Oil Zone	___	Observation	___
Water Flood Source	___		

DATE ______
RECOMPLETED ______
REMARKS ______

ENGINEER'S CHECK LIST

1. Summary, History, & Core record (dupl.) ✓
2. Electric Log ✓
3. Operator's Name ✓
4. Signature ✓
5. Well Designation ✓
6. Location ✓
7. Elevation ✓
8. Notices ✓
9. "T" Reports ✓
10. Casing Record ✓
11. Plugs ✓
12. Surface Inspection ______
13. Production ✓
14. E Well on Prod. Dir. Sur. ______

CLERICAL CHECK LIST

1. Location change ___ (F-OGD165) ______
2. Elevation change ___ (F-OGD165) ______
3. Form OGD121 ✓
4. Form OG159 (Final Letter) ______
5. Form OGD150b (Release of Bond) 12/23/82
6. Duplicate logs to archives ______
7. Notice of Records due (F-OGD170) ______

RECORDS NOT APPROVED
Reason: ______

RECORDS APPROVED 12-23-82 EF

RELEASE BOND Yes
Date Eligible 12-1-82
(Use date last needed records were received.)

MAP AND MAP BOOK W5-2 EF 12-23-82

OGD2 (10-78-GSRI-5M)

LONG BEACH OFFICE - USE REVERSE SIDE

CHECK LIST - RECORDS RECEIVED AND WELL STATUS

Well No. _____

API No. _____ Sec. _____, T. _____, R. _____, _____ B.&M.

WORK PERFORMED	STATUS	DATE
Drill _____ Redrill _____ Deepen _____	Producing _____	
Plug _____ Alter Casing _____	Recompleted Producing _____	
Water Flood _____ Water Disposal _____	Water Flood _____	
Abandon _____	Water Disposal _____	
Other _____	Abandoned _____	
	Other _____	
	MAP AND BOOK _____ Engineer _____	

RECORDS FILED AND DATE Clerk _____

Summary _____

Log and Core _____

History _____

E-log _____

_____

Directional Survey _____

Other _____

(Check records for signature and correct name of operator or well, section, township, range, and field.)

Location _____ Notice states _____

_____

_____

_____

_____

Elevation _____ Notice states _____

_____

_____

_____

Production Reports _____

_____

(If production reports not received, make notation and inform Senior Stenographer when received.)

RECORDS & REQUIREMENTS CHECKED Engineer _____

_____

_____

_____

_____

_____

_____

_____

Surface Inspection _____

Data Needed _____

Request Records _____ OGD170 _____

Correct records _____ OGD165 _____
(Specify)

CARDS _____

BOND _____

Hold _____ Reason _____

Release _____ Date Eligible _____ OGD150 _____

End premium year _____

Release requested _____ (Check One)

Bond superseded _____

Well abandoned _____

Environmental Inspection _____ Engineer _____

FINAL LETTER _____ OG159 _____
and
File cleared _____ OGD121 _____

OGD2 (LONG BEACH)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

RECEIVED
MAR 19 1982
DIVISION OF OIL & GAS
COALINGA

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

Operator CenCal Drilling Inc., Operator, Well No. 15-x 29 "Cheney Ranch", API No. 019-21466,

Sec. 29, T. 14S, R. 13E, MD B. & M., Cheney Ranch Gas Field, Fresno County.

Location 530' S + 530 E from W¼ COR Sec 29, T14SR13E
(Give surface location from property or section corner, or street center line and/or lambert coordinates)

Elevation of ground above sea level 375 feet.

All depth measurements taken from top of Kelly Bushing which is 11 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date 12/15/81

Signed William F Patton

(Engineer or Geologist)

Title Operator

Commenced drilling 7-12-81

Completed drilling 11-19-81

Total depth (1st hole) 7300 (2nd) (3rd)

Present effective depth 7300

Junk None

GEOLOGICAL MARKERS	DEPTH
BASE MIOCENE	3503
TOP Eocene sand	4875
TOP Cretaceous	5820
TOP Cheney Ranch Sand	6930

Formation and age at total depth Moreno-Cretaceous

Commenced producing (Date) Flowing/gas lift/pumping (Cross out unnecessary words)

Name of producing zone Cheney Ranch Sand

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	3BD	60	.10	80	650	850
Production after 30 days	3BD	60	.10	80	650	850

Casing Record (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
9 5/8	770	0		K-55 8RLT&C and ST&C		12 ¼	203	
4 ½	7300	0	11.6	K-55	New	7 7/8	400	7257
					Stage Collar		540	1927

Perforated Casing
(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

Two .26" holes per foot 7216 - 7226 tubing gun. Reshot
two 1/2" holes per foot 7216 - 7226 with casing gun.
Shot two .26" holes per foot 7272 - 7292.

Was the well directionally drilled? No If yes, show coordinates at total depth

Electrical log depths 7288 Other surveys

OG100 (1-76-GSRI-3M)

ATTACH ONE COPY OF EACH LOG AND SURVEY

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

RECEIVED
MAR 19 1982
DIVISION OF OIL & GAS
COALINGA

History of Oil or Gas Well

Operator CenCal Drilling Inc. Field Cheney Ranch County Fresno
Well 15-x, Sec. ....., T ....., R ....., B. & M.
A.P.I. No. 019-21466 Name C. F. Green (Person submitting report) Title Agent (President, Secretary or Agent)
Date Nov. 1st, 19 81

Signature .....

..... (Address) ..... (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
7/12/81	SPUD well and drill to 770.
7/13/81	Circulate hole clean. Run and cement 770 9 5/8 K-55 casing. (773 on hook). B&W guide shoe and insert valve.
	Cement Detail
	206 Class G cmt 1:1 pearlite w 2% Gel and 3% CacL2. Displaced top rubber plug w 304 cuft of mud. Plug bumped with 1200 P.S.I. Float held ok. Got 100 cuft to surface. C.I.P 4:50 am.
	Tested blind rams 2" & 3" times at 1200' P.S.I. Tested Hydril and pipe rams to 1200 P.S.I.
	BOPE tested and approved by D.O.G. Drilled out and drilled 7 7/8 hole to 1372.
7/14/81 to 7/22/81	Drilled 7 7/8 hole from 1372 to 7290. Install Jacobs mud logging unit at 4875, and logged well to 7290. Had gas shows on mud log from 6835-6872 and from 7146 to 7260. Circulated hole clean at 7290, wipe hole from 7290 to 6570. Circulate for elog.
7/23/81	Ran Welex Induction log. Clean out to bottom, drill to 7300. (circulate gas cut mud at 4400. Mud wt was cut from 77# to 70#). While circulating at 7300 mud was cut 77# to 76# by gas.
7/24/81	Ran 186 joints 4½" to 55 11.6# 8rd seamless new casing (7317.28' over all length) with shoe, float collar, and stage collar. Set guide shoe at 7300. Float collar at 7258, stage collar at 1927'. Used 23 centralizers on bottom 4 joints of string. Stage collar at 1927'. Placed 50 cuft mud wash and 25 cuft water ahead of 400 cuft. 1:1 class G. & Howcolite poz mixed with 4% gel and .75% friction reducer followed by 280 cu.ft class G neat premixed with .75% friction reducer. Displaced top rubber plug with 645 cu.ft KCL water. Bumped plug. Bled back 6 cu.ft. CIP 4:15 pm.
	2nd stage cement. Dropped bomb and opened stage collar with 160 P.S.I. at 4:30 p.m. Circulated 15 minutes. Placed 50 cuft of mud wash

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

RECEIVED
MAR 19 1982
DIVISION OF OIL & GAS
COALINGA

History of Oil or Gas Well

Operator CenCal Drilling Inc. Field Cheney Ranch County Fresno
Well 15-x, Sec. 29, T 14S, R 13E, B. & M.
A.P.I. No. 019-21466 Name C. F. Green (Person submitting report) Title Agent (President, Secretary or Agent)
Date Nov. 1st, 19 81.

Signature .....

..... (Address) ..... (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
7/21/81 cont.	ahead of 540 cuft 1:1 class G and Howcolite poz premixed with 4% gel, followed by 100 cuft Class G neat premixed with 3% $CaCL_2$. Displaced top rubber with 75 cuft 3% KCL water. Had cement returns ok. Pumped plug and closed stage collar w 2500 PSI upper stage cement in place at 5:25 pm.
	Landed casing. Installed well head. Moved off drilling rig.
8/13/81	Ran Welex combination Neutron collar recorder and cement bond log. Recorded interval 5150' to 7300'. Rigged up production hoist and ran two 3/8" tubing to 7171'.
8/14/81	Ran Welex combination gun and collar locater. Shot interval 7216-7226 with two .26" holes per foot. Rigged up swab and swabbed well to 5000'. Well did not come in.
8/15/81 to 8/17/81	Idle
8/17/81	Rigged up circulating pump. Circulated well clean with salt water. Circulated rotary mud from bottom. Pulled tubing. Reshot well with casing gun. Two ½" holes per foot from 7216 - 7226. Reran two 3/8" tubing.
8/18/81	At 8:00 am well had 180 PSI on casing and 50 PSI on tubing. Removed bull plug from well head and well flowed a dribble of water with rainbow colors from top of christmas tree. Flow estimated to be 1 gallon every 2 minutes. Started swabbing. Swabbed fluid level to 5000'. Shut well in for night. Casing pressure 100 PSI.
8/19/81	Started swabbing 8:00 am. Casing pressure 610 PSI. Fluid level 3700'. Swabbed well until 12 pm, fluid level 6000'. Well started flowing gas estimated 100 MCF/day rate. Shut in well 6 pm.
8/20/81	Casing pressure 800 PSI. Tubing pressure 600 PSI. Well shut in.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

RECEIVED
MAR 19 1982
DIVISION OF OIL & GAS
COALINGA

History of Oil or Gas Well

Operator CenCal Drilling Inc. Field Cheney Ranch County Fresno
Well 15-x, Sec. 29, T 14S, R 13E, B. & M.
A.P.I. No. 019-21466 Name C. F. Green (Person submitting report) Title Agent (President, Secretary or Agent)
Date Nov. 1st, 19 81.

Signature .....

..... (Address) ..... (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11/12/81	Tubing pressure 300, casing pressure 580. Rigged up McCullough tubing perforating gun. Shot interval 7172-7192 with two .26" holes per foot. Tubing gauge jumped 100 PSI when gun went off. There was no reaction on the casing pressure. Pulled tool. All shots were fired.
11/17/81	Tubing 950, casing 1360. Shut in.
11/18/81	Tubing 1220, casing 1620.
11/19/81	Tubing 1320, casing 1750.

*** C01 ***

PROCESSED 08/82

CALIFORNIA DIVISION OF OIL AND GAS
WELL INFORMATION LIST

DISTRICT: 5 (1)	FIELD CODE: 134 (2)	FIELD: CHENEY RANCH GAS	AREA CODE: 00 (3)	AREA: ANY AREA

API WELL NO.: C1921446 (4)	LEASE NAME: CHENEY RANCH (5)	OPR WELL NO: 15X (6)	SEC T R B&M 29 14S 13E MD (7)	WELL STAT: A (8)	OPERATOR CODE: C4350 (9)	OPER STAT: A

OPERATOR NAME AND ADDRESS

CENCAL DRILLING INC
P O BOX 936
BAKERSFIELD CA
93302

BASIN 2 (10)	REGION 3 (11)	LATITUDE ° ' " (12)	LONGITUDE ° ' "	GENERAL LOCATION (13)

COUNTY CODE: 10 (14)	COUNTY NAME FRESNO FRESNO	CCS-ZONE X-CORD E Y-CORD N (15)	UTM-ZONE X-CORD E Y-CORD N (16)	SWRCB NO.: (17)

POOL CODE:05 (18)	COMPLETION DATE: 12/80 (19)	DEPTH 00000 (20)	X-CORD Y-CORD (21)	REMARKS: 1- (22) 2- 3-

POOL NAME: U. CRETACEOUS

WELL TYPE	DATE	PROD/INJ STATUS	OIL/COND BBLS	WATER BBLS	PROD DAYS	GAS/PROD MCF	GRAV OIL	CASING PSI	TUBING PSI	BTU M-O	WATER DISP	WATER/STEAM INJ-BBLS	INJ DAYS	GAS/AIR INJ-MCF	INJ PSI	SOURCE WATER	KIND WATER
DG	01/82	00	0	187	26	2187		0825	0125	1	6						
DG	02/82	00	47	213	22	733		0525	0125	1	6						
DG	03/82	00	0	30	27	1102		0475	0125	1	6						
DG	04/82	00	0	120	30	1326		0650	0000	1	6						
DG	05/82	00	0	120	31	2165		0650	0000	1	6						
DG	06/82	00	55	0	30	1998		0600		1	6						
DG	07/82	00	0	110	41	3370		0000	0150	1	6						
TOTAL			102	780		12881											

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 582-46

DIVISION OF OIL AND GAS

Report on Operations

Charles F. Green, Agent
CENCAL DRILLING, INC.
P.O. Box 1664
Bakersfield, CA 93302

Coalinga Calif.
March 30, 1982

Your operations at well "Cheney Ranch" 15X, API No. 019-21446, Sec. 29, T. 14S, R. 13E M.D., B.& M. Cheney Ranch Gas Field, in Fresno County, were witnessed ~~reviewed~~ on March 30, 1982. E.R. Fleming, representative of the supervisor, was present from ____ to ____. There were also present ____

Present condition of well: 9 5/8" cem. 770'; 4½" cem. 7300; c.p. 1927, perf. 7226-7216 & 7192-7172 W.S.O. T.D. 7300'.

The operations were performed for the purpose of evaluating the 4½" water shut-off by reviewing production data.

DECISION: THE 4½" WATER SHUT-OFF AT 7172' IS APPROVED

ERF/dw
cc: Company, Bakersfield

M.G. MEFFERD
State Oil and Gas Supervisor

By W. E. VanMatre
Deputy Supervisor

(for) RICHARD F. CURTIN

OG109 (10-78-GSRI-15M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 582-46

DIVISION OF OIL AND GAS

Report on Operations

[illegible]

_______________ Calif.

Your operations at well [illegible], API No. [illegible], Sec. 29, T. [illegible], R. [illegible], B.& M. [illegible] Field, in Fresno County, were witnessed on [illegible], [illegible], representative of the supervisor, was ~~present from~~ _______ ~~to~~ _______. There were also present —

Present condition of well: [illegible] cem. [illegible] 4½" cem. [illegible], perf. [illegible] 7216 & 7172-[illegible] W.S.O. T.D. 9300'.

The operations were performed for the purpose of evaluating the 4½" water shut-off by reviewing production data.

DECISION: THE 4½" WATER SHUT-OFF AT 7172' IS APPROVED.

cc. Bakersfield.

M. G. MEFFERD
State Oil and Gas Supervisor

By (for) Richard F. Curtin
Deputy Supervisor

OG109 (10-78-GSRI-15M)

FORM OG111 (11/80/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 581-386

REPORT ON PROPOSED OPERATIONS

134 (field code)
00 (area code)
05 (new pool code)
05 (old pool code)

Charles F. Green, Agent
CENCAL DRILLING, INC., OPR.
P. O. Box 1664
Bakersfield, CA 93302

Coalinga, California
November 10, 1981

Your supplementary proposal to drill well "Cheney Ranch" 15X, A.P.I. No. 019-21446, Section 29, T. 14S, R. 13E, M.D. B. & M., Cheney Ranch field, ---------- area, U. Cretaceous pool, Fresno County, dated 11/4/81, received 11/6/81 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THIS DIVISION SHALL BE NOTIFIED TO WITNESS a production test demonstrating water shut-off within 30 days of completion.

NOTE: When it becomes necessary to contact this Division concerning the witnessing of operations, please call (209) 935-2941.

Individual Bond #504 0806, dated December 22, 1980
VEV/bcm
cc: Company, Bakersfield

M. G. MEFFERD, State Oil and Gas Supervisor
By Richard F. Curtis
Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
	✓	✓	

DIVISION OF OIL AND GAS

COALINGA Calif.

A notice to you dated Dec 28th, 1980, stating the intention to

Drill Cheney Ranch 15-X (Drill, rework/abandon) (Well name and number), API No. 019-21446;

Sec. 29, T. 14S, R. 13E, MD B. & M., Cheney Ranch Field,

Fresno County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 7300

Complete casing record including plugs and perforations:

9 5/8 Casing cemented at 770

4 1/2 Casing cemented. 7300 - (Top of cement 5200)

AND cemented 1927 To surface. perforated 7216 - 7226.

We now propose

to perforate 4 1/2 casing from

7145 - 7155 and

7172 - 7192

(Cement Bond Log Attached)

RECEIVED
NOV 6 1981
DIVISION OF OIL & GAS
COALINGA

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address P.O. Box 936 (Street)

Bakersfield Calif 93302 (City) (State) (Zip)

Telephone Number 805-325-6141

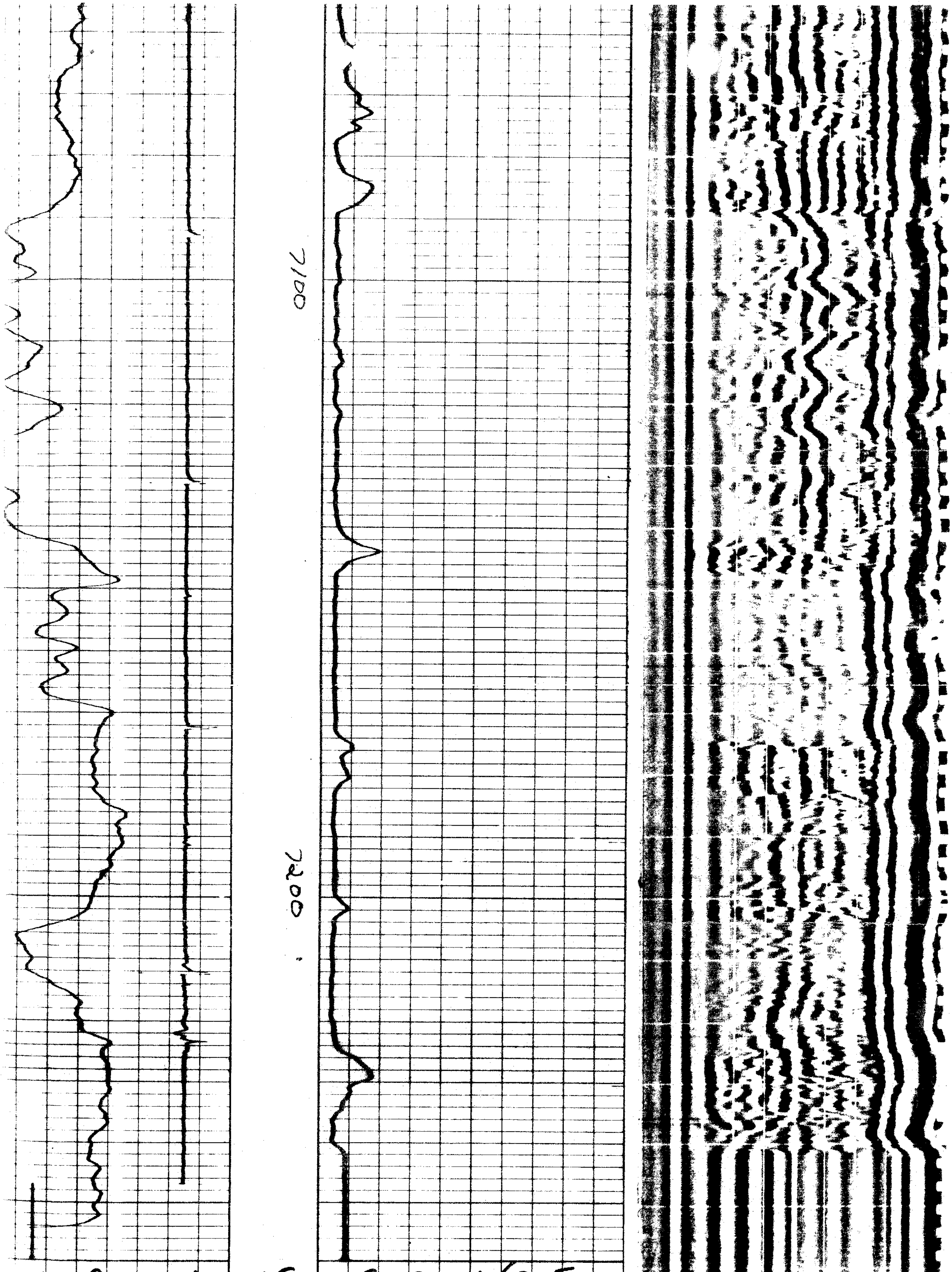
Central Drilling LLC (Name of Operator)

Type of Organization Joint Venture (Corporation, Partnership, Individual, etc.)

By C.F. Green (Name) 11/2/8 (Date)

Signature C.F. Green

OG123 (7-76 GSR1 5M)



KAL Drilling Inc 15-X - Sec 29. 14/13 Fresno Co.

FORM OG111(11/80/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 581-298

REPORT ON PROPOSED OPERATIONS

134 (field code)
00 (area code)
05 (new pool code)
--- (old pool code)

Charles F. Green, Agent
CENCAL DRILLING, INC.
P. O. Box 1664
Bakersfield, CA 93302

Coalinga, California
August 7, 1981

Your supplementary proposal to drill well "Cheney Ranch" 15X, A.P.I. No. 019-21446, Section 29, T. 14S, R. 13E, M.D. B. & M., Cheney Ranch Gas field, ---------- area, U. Cretaceous pool, Fresno County, dated 7/31/81, received 8/3/81 has been examined in conjunction with records filed in this office.

THE NOTICE IS CORRECTED AS PER TELCOM C. F. GREEN/V. E. VAN MATRE ON 8-7-81 TO STATE:

Run Cement Bond Log
Shoot for W.S.O. at 6710'.
Perforate interval 7216'-7226' for production.

DECISION: THE PROPOSAL IS APPROVED PROVIDED THAT THIS DIVISION SHALL BE NOTIFIED TO WITNESS a test of the 4-1/2" water shut-off at 6710'.

NOTES:

1. When it becomes necessary to contact this Division concerning the witnessing of operations, please call (209) 935-2941.
2. In lieu of a test of the 4-1/2" water shut-off, the Division will accept a cement bond log showing good bonding above the objective zone and a production test of that zone within 30 days of completion.

Individual Bond #504 0806, dated 12/22/80
VEV/bcm
cc: Company, Bakersfield

M. G. MEFFERD, State Oil and Gas Supervisor

By V. E. Van Matre for
Richard F. Curtin Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
Ind.	✓	✓	

" 504 0806, dated 12/22/80

DIVISION OF OIL AND GAS

COALINGA Calif.

A notice to you dated July 27, 1981, 19__, stating the intention to

Run + Cement 4½" casing "CHENEY RANCH" 15X
(Drill, rework, abandon) (Well name and number), API No. 019-2446

Sec. 29, T. 14S, R. 13E, MD B. & M., Cheney Ranch Gas Field,

Fresno County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 7290

Complete casing record including plugs and perforations:

9 5/8 Cemented at 770

4½ Cemented at 7290 w/ DV Collar at 1900 and Cemented at Surface

RECEIVED
AUG 3 1981
DIVISION OF OIL & GAS
COALINGA

We now propose

Run Cement Bond log
Shoot For hrso at 6900
Perforate interval 7216 - 7226 7215 - 7230 For production
(Elog + Mud log submitted herewith)

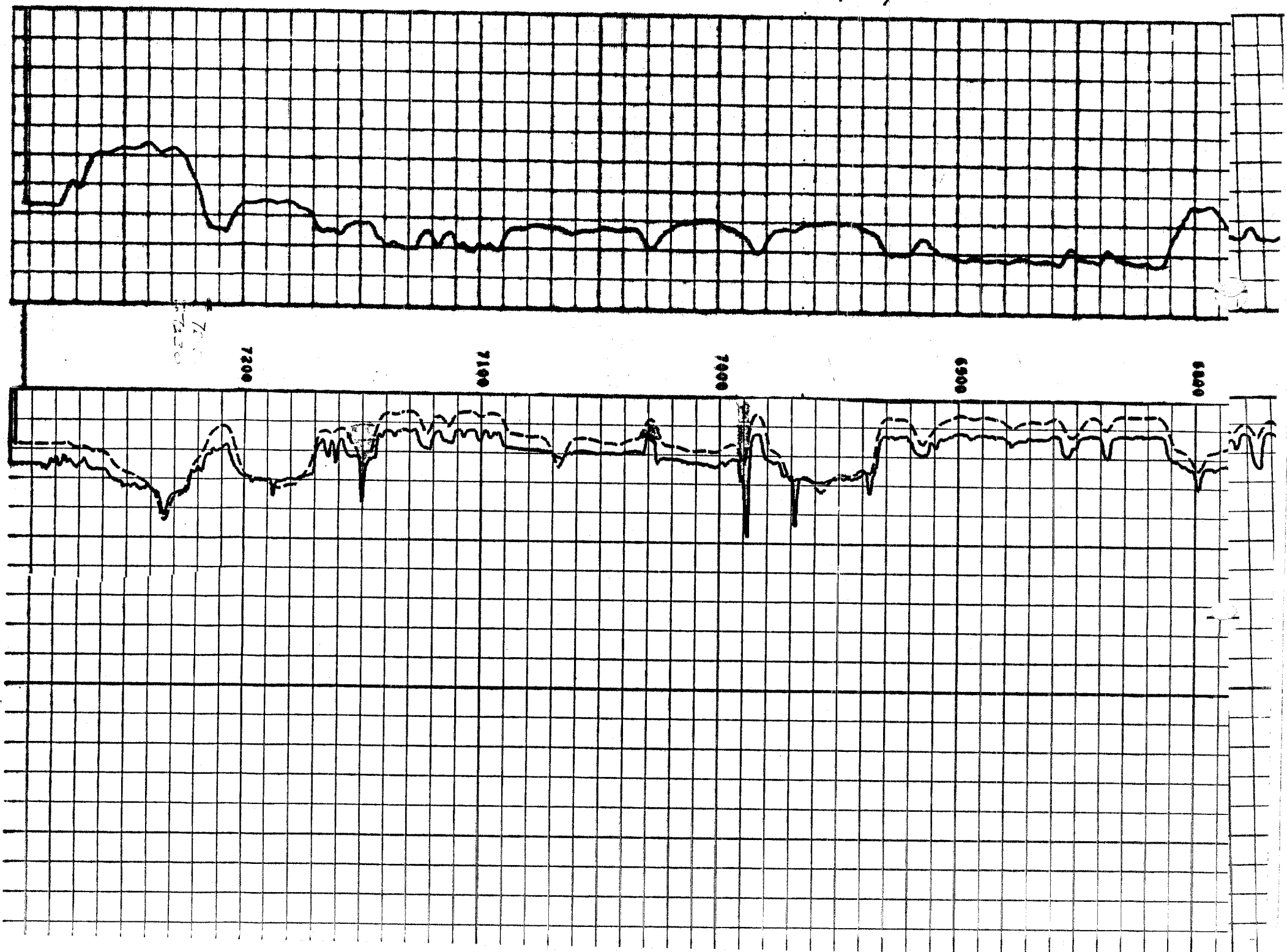
It is understood that if changes in this plan become necessary we are to notify you immediately.

Address P.O. Box 936 (Street)
Bakersfield, Calif 93302 (City) (State) (Zip)
Telephone Number 805-325-6141

Cencal Drilling Inc. Oprr. (Name of Operator)
Type of Organization Joint Venture (Corporation, Partnership, Individual, etc.)
By C.F. Green (Name) July 31, 1980 (Date)
Signature C.F. Green

OG123 (7-76-GSR1-5M)

CenCal Drilling Inc - 15-X - Sec 29-14/13 - Fresno Co



RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
2nd	✓	✓	

DIVISION OF OIL AND GAS

Coalinga Calif.

A notice to you dated Dec 28th 1980., 19___, stating the intention to

Drill (Drill, rework, abandon) Cheney Ranch 15X (Well name and number), API No. 019-21447

Sec. 29, T. 14S, R. R13E, MD B. & M., Cheney Ranch Gas Field,

Fresno County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 7290

Complete casing record including plugs and perforations:

9 5/8 Cemented at 770.

RECEIVED
JUL 28 1981
DIVISION OF OIL & GAS
COALINGA

We now propose

4 1/2 Casing Cemented at 7290. DV Collar at 1900. Cement TD To 5200, and 1900' To Surface.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address P.O. Box 936 (Street)

Bakersfield (City) Calif. (State) 93302 (Zip)

Telephone Number 805 323 6141

Central Drilling Inc. - Operator (Name of Operator)

Type of Organization Joint Venture (Corporation, Partnership, Individual, etc.)

By C.F. Green (Name) 7/23/81 (Date)

Signature C.F. Green

OG123 (7-76-GSR1-5M)

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION

COALINGA, Calif.

JULY 23 1981

Operator CEN CAL DRILLING, INC, OPR Well No. "CHENEY RANCH" 15X

Field CHENEY RANCH GAS Sec. 29 T. 14S. R. 13E. M.D. B&M

~~personal~~

A telephone conversation was held, concerning above well, with Mr. FRED GREEN,

CONSULTANT for above operator on JULY 23 1981 at 9:00 A.M.

Details of the conversation were as follows:

T.D. @ 7290 BFW @ 1600

PROPOSE TO CEM 4½" @ 7290 AND LIFT CEMENT TO ± 5200' AND THRU A STAGE COLLAR AT 1900 LIFT CEMENT TO SURFACE.

PROPOSAL APPROVED

WILL STOP AT D.O.G. OFFICE TODAY TO FILL OUT SUPPLEMENTARY NOTICE.

W.S.O. REQUIREMENTS WILL BE LISTED IN RESPONSE

(JOHN MUIR WILL SIT ON HOLE FOR SETTING & CEMENTING CASING.)

(Signed) W. E. Van Matre

Title ASSOC O & G ENGR

OG136A (12-77-GSR1-1M) (see reverse side for proposed well operations)

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION
(Proposed Well Operations)

Operator _____ Well No. _____

Field _____ Sec. _____ T. _____ R. _____ _____ B&M

personal
A telephone conversation was held, concerning above well, with Mr. _____

_____ for above operator _____ 19____, at _____ M.

Details of the conversation were as follows:

Total depth _____ Plugs _____

Casing record _____

_____

Oil or gas showings _____

Results of tests _____

_____

Stratigraphic markers _____

_____

Geologic age at bottom _____ Base of fresh water _____

Operator proposes the following work:

_____

_____

_____

_____

Additional requirements outlined:

Test of W.S.O. to be witnessed by D.O.G. at _____ By operator at _____

Plugs to be located by D.O.G. at _____ By operator at _____

Notice to be filed immediately ( ) Yes ( ) Not necessary

Other data _____

_____

(Signed) _____

Title _____

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 581-153

DIVISION OF OIL AND GAS

Report on Operations

Mr. Charles F. Green, Agent
CENCAL DRILLING, INC.
P.O. Box 1664
Bakersfield, Calif 93302

Coalinga, Calif.
July 14, 1981

Your operations at well "Cheney Ranch" 15X, API No. 019-21446, Sec. 29, T. 14S, R. 13E M.D., B.& M. Cheney Ranch Gas Field, in Fresno County, were witnessed on 7/13/81. C. E. Parli, representative of the supervisor, was present from 1711 to 1840. There were also present Troy Azlin, Foreman for Gary Drilling.

Present condition of well: 9-5/8" cem. 770'. T.D. 770'. (Standing cemented).

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION: THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

CEP/bcm
cc: Company, Same Add.

DEFICIENCIES -- TO BE CORRECTED
None

DEFICIENCIES -- CORRECTED
None

CONTRACTOR: Gary Drilling

M. G. MEFFERD
State Oil and Gas Supervisor

By Richard F. Curtin
Richard F. Curtin Deputy Supervisor

OG109 (10-78-GSRI-15M)

DIVISION OF OIL AND GAS

BLOWOUT PREVENTION EQUIPMENT MEMO

T 15S

Operator Concal Drilling Inc. Well "Cheney Ranch" 15X Field Cheney Ranch County Fresno

(API 019-21446) sec 29, T14S, R13E, MD B&M Gas

VISITS: Date | Engineer | Time | Operator's Rep. | Title

1st 7-13-81 | C. Parli | 1711 to 1840 | Inay Azlin | Drilling Forman For Gary Drlg.

2nd _____ | _____ | _____ to _____ | _____ | _____

Casing record of well: 9 5/8" cem. 770 T.D. 770 (Standing Cemented)

OPERATION: Testing ~~(inspecting)~~ the blowout prevention equipment and installation.

DECISION: The blowout prevention equipment and installation are approved.

REQUIRED BOPE CLASS: III B 3M

Proposed Well Opns: _____ MPSP: _____ psi

Hole size: 12 1/2" fr. _____' to 770', 7 7/8" to 7300' & _____" to _____'

CASING RECORD (BOPE ANCHOR STRING ONLY)					Cement Details	Top of Cement	
Size	Weight(s)	Grade (s)	Shoe at	CP at		Casing	Annulus
9 5/8"			770		2.06 SX. cl "G" 1/4 perLite w 2% Gel + 3% cacl. 100 cf. returns to Surf.		

BOP STACK							a	b	a/b	TEST DATA			
API Symb.	Ram Sz.	Mfr.	Model or Type	Size In.	Press. Rtg.	Date Last Overhaul	Gal. to Close	Rec.Time Min.	Calc.GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press
A		Hydrill	5K	10								7-13-81	900
P	4"	Shaffer	5K	10								7-13-81	1250
B		"	5K	10								7-13-81	12.00

ACTUATING SYSTEM				
Accum.Unit(s) Wkg.Press. 2750 psi				
Total Rated Pump Output _____ gpm				
Distance From Well Bore 75 ft.				
	Mfr.	Accum. Cap.	Precharge	
1	Koomey	80 gal.	1000 psi	
2		gal.	psi	
CONTROL STATIONS			Elec.	Hyd.
L	Manif. at accum.unit			L
L	Remote at Drlr's stn.		L	
	Other:			
EMERG. BACKUP SYST.			Press.	Wkg.Fl.
L	N2 Cyl	No: 3 Tpe:	1 2300	7.8 gal
	Other:		2 2200	7 gal
			3 2300	7.8 gal
			4	gal
			5	gal
			6	gal

AUXILIARY EQUIPMENT							
		No.	Sz. (in)	Rated Press.	Connections Weld	Flan.	Thrd.
L	Fill-Up Line		2	3000			L 1500
L	Kill Line		2	3000		L	12.00
L	Control Valve(s)	1		3000			L 12.00
L	Check Valve(s)	1		3000			L
L	Auxil. Pump Connec.			3000			L
L	Choke Line		3	3000	L	L	L 1500
L	Control Valve(s)	2		3000		L	1500
L	Pressure Gauge						L
L	Adjustable Choke(s)	2	2	3000		L	1500
L	Bleed Line		2				L
L	Upper Kelly Cock						1500
L	Lower Kelly Cock		4	3000			
L	Standpipe Valve						1500
L	Standpipe Pressure Ga.						
	Pipe Safety Valve						
L	Internal Preventer		4	3000			

HOLE FLUID MONITORING EQUIPMENT		Alarm		Class
		Aud.	Vis.	
	Calibrated Mud Pit			A
L	Pit Level Indicator		L	B
	Pump Stroke Counter			
	Pit Level Recorder			C
	Flow Sensor			
	Mud Totalizer			
	Calibrated Trip Tank			
	Other: Mud Logger will Have Equipment			

REMARKS: Mud Logger on Site @ 6500

Hole Fluid Type	Weight	Storage-Pits

OGD-9(5-79 DWRR-3M)

DEFICIENCIES — TO BE CORRECTED None

DEFICIENCIES — CORRECTED None

CONTRACTOR Gary Drilling

FORM OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 580-503

REPORT ON PROPOSED OPERATIONS

134 (field code)
00 (area code)
05 (pool code)

Mr. Charles F. Green, Agent
CENCAL DRILLING, INC., OPERATOR
P.O. Box 1664
Bakersfield, Calif

Coalinga, California
December 30, 1980

Your proposal to drill well "Cheney Ranch" 15X,
A.P.I. No. 019-21446, Section 29, T. 14S, R. 13E, M.D. B. & M.,
Cheney Ranch Gas field, ---------- area, U. Cretaceous pool,
Fresno County, dated --------, received 12/30/80 has been examined in conjunction with records filed in this office.

DECISION: THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be pumped back of the 8 5/8" casing to fill to the surface.
2. Mud fluid of sufficient weight and proper consistency to prevent blowouts shall be used in drilling, and the column of mud fluid shall be maintained to the surface at all times, particularly while pulling the drill pipe.
3. Blowout prevention equipment conforming to Division of Oil and Gas Class III B 3M requirements is installed on the 8 5/8" casing and maintained ready for use at all times. A copy of these requirements is enclosed.
4. Blowout-prevention practice drills are conducted at least weekly and recorded in the log book.
5. THIS DIVISION SHALL BE NOTIFIED TO WITNESS a pressure test of the blowout-prevention equipment prior to drilling out the shoe of the 8 5/8" casing.

NOTES:

1. When it becomes necessary to contact this Division concerning the witnessing of operations, please call (209) 935-2941.

2. A SUPPLEMENTARY NOTICE SHALL BE FILED prior to running any (additional) casing or placing any cement plugs in the hole. At that time additional requirements will be outlined for the protection of oil, gas, or fresh water encountered, either by lifting cement or by multiple-stage cementing.

3. RECORDS FOR ALL WORK DONE UNDER THIS APPROVAL ARE DUE WITHIN 60 DAYS AFTER COMPLETION OF THE WORK.

Individual Bond #504 0806 dated 12/22/80
VEV/jp
cc: Company, Bakersfield

M. G. MEFFERD, State Oil and Gas Supervisor
By V. E. Van Matre
Acting - Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

RECEIVED
DEC 30 1980

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

DIVISION OF OIL & GAS	C.E.Q.A. INFORMATION		
BAKERSFIELD COALINGA	NEG. DEC. ☐	E.I.R. ☐	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☒
CLASS	S.C.H. NO.	S.C.H. NO.	
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
WS-2 12/30/80	12/30/80	✓	Ind. # 504 0806, dated 12/22/80	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well Cheney Ranch 15x-29, API No. 019-21446 (Assigned by Division)

Sec. 29, T. 14S, R 13 E MD B. & M., Cheney Ranch Field, Fresno County.

Legal description of mineral-right lease, consisting of 160 acres, is as follows: (Attach map or plat to scale)

Southwest One Quarter Section 29

Do mineral and surface leases coincide? Yes xx No ____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 530' feet South (Direction) along section ~~property~~ (Cross out one) line and 530' feet East (Direction)

at right angles to said line from the West Quarter corner of section ~~property~~ (Cross out one) ____ or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth: ____ feet ____ (Direction) and ____ feet ____ (Direction)

Elevation of ground above sea level 375 feet.

All depth measurements taken from top of Kelly Bushing (Derrick Floor, Rotary Table, or Kelly Bushing) that is 11 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
8 5/8"	28#	Grade D	0	750'	Shoe to Surface	400 Cu Ft.
Balance of casing program contingent on discovery at production sand. D.O.G. to be advised before running casing.						

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Moreno Sands 7250 approx (Name, depth, and expected pressure) Estimated total depth 7400

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
CENCAL DRILLING INC., OPERATOR	Joint Venture	
Address	City	Zip Code
P. O. Box 936	Bakersfield Ca.	93302
Telephone Number / Name of Person Filing Notice	Signature	Date
805-325-6141 William F. Patton	William F Patton	

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

OG105 (2-79-DWRR-10M)

Information for compliance with the California Environmental Quality Act of 1970 (C.E.Q.A.).

If an environmental document has been prepared by the lead agency, please submit a copy of the document with this notice *or* supply the following information:

Lead Agency: _____

Contact Person: _____

Address: _____

_____

Phone: ( ) _____

FOR DIVISION USE ONLY

District review of environmental document (if applicable)? Yes ☐ No ☐

Remarks: _____

_____

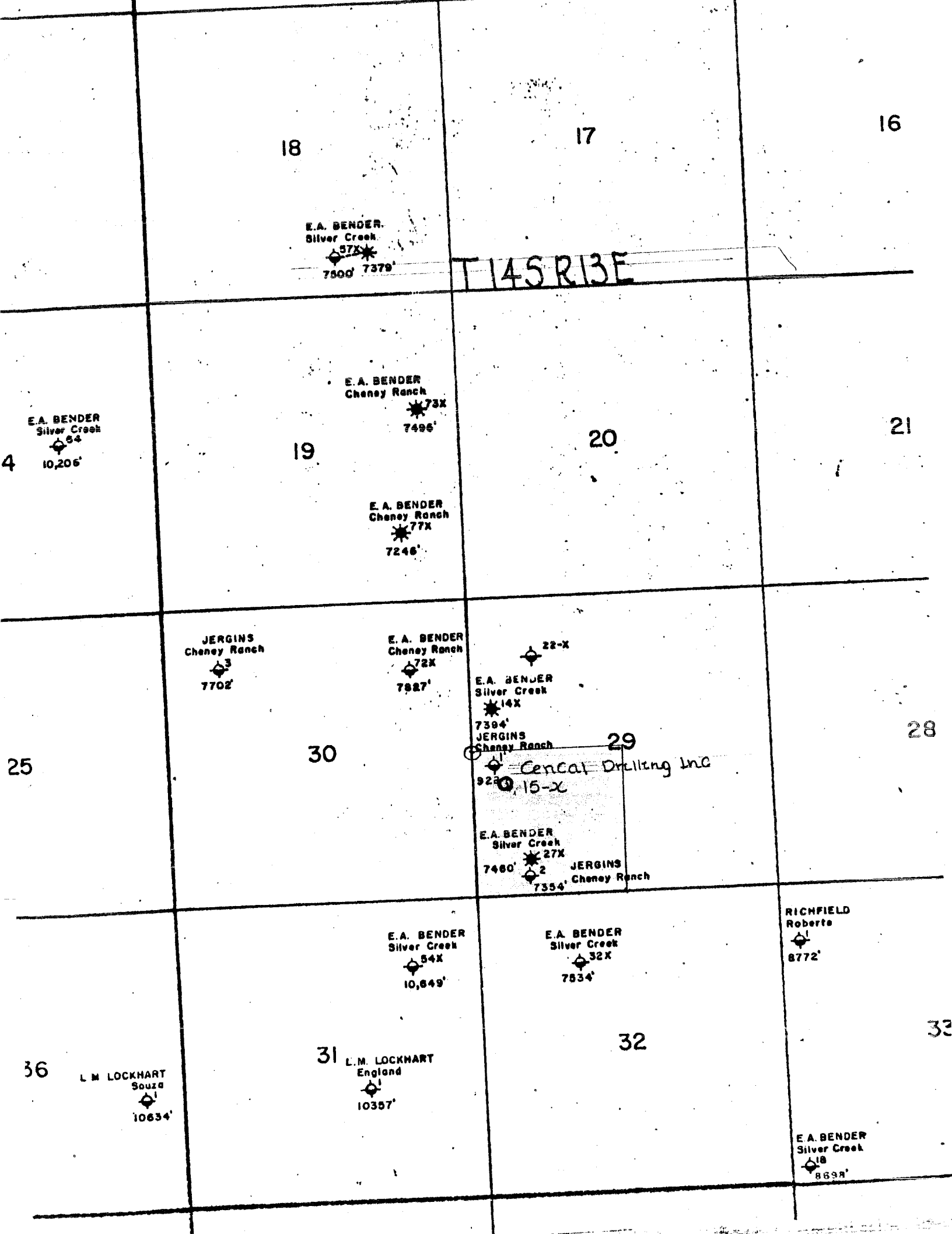
_____

CRITICAL WELL

As defined in the California Administrative Code, Title 14, Section 1720(a), "Critical well" means a well within:

(1) 300 feet of the following:
(A) Any building intended for human occupancy that is not necessary to the operation of the well; or
(B) Any airport runway.
(2) 100 feet of the following:
(A) Any dedicated public street, highway, or nearest rail of an operating railway that is in general use;
(B) Any navigable body of water or watercourse perennially covered by water;
(C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground, or any other area of periodic high-density population; or
(D) Any officially recognized wildlife preserve.

Exceptions or additions to this definition may be established by the supervisor upon his own judgment or upon written request of an operator. This written request shall contain justification for such an exception.


T14S R13E
18
17
16
E.A. BENDER
Silver Creek
57X
7500' 7379'
E.A. BENDER
Cheney Ranch
73X
7496'
E.A. BENDER
Silver Creek
64
10,206'
4
19
20
21
E.A. BENDER
Cheney Ranch
77X
7246'
JERGINS
Cheney Ranch
3
7702'
E.A. BENDER
Cheney Ranch
72X
7827'
22-X
E.A. BENDER
Silver Creek
14X
7394'
JERGINS
Cheney Ranch
1
923
15-X
Cencal Drilling Inc
25
30
29
28
E.A. BENDER
Silver Creek
27X
7480'
2
7354'
JERGINS
Cheney Ranch
E.A. BENDER
Silver Creek
54X
10,649'
E.A. BENDER
Silver Creek
32X
7834'
RICHFIELD
Roberts
1
8772'
36
L M LOCKHART
Souza
1
10634'
31
L.M. LOCKHART
England
1
10357'
32
33
E.A. BENDER
Silver Creek
18
8698'

Well Records for Artificial Penetration #17

Cheney Ranch #15X

(API No. 1921924)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF WELL ABANDONMENT

Coalinga, California

January 29, 1986

Jeff Greening, Agent
AMERICAN HUNTER EXPLORATION, LTD.
306 Pescado Circle
Rancho Murieta, CA 95683

Your report of abandonment of well "Souza" 1
(Name and number)
A.P.I. No. 019-21924, Section 36, T. 14S, R. 12E, M.D. B. & M.,
---------- field, Fresno County,
dated July 5, 1984, received July 13, 1984, has been examined in conjunction with records filed in this office, and we have determined that all of the requirements of this Division have been fulfilled.

GWM/bcm
cc: Conservation
Company, Canada

M.G. MEFFERD, State Oil & Gas Supervisor
State Oil and Gas Supervisor
By Richard F. Curtin
Deputy Supervisor
Richard F. Curtin

OG159 (11/82/GSR 1/8M)

DIVISION OF OIL AND GAS

CHECK LIST - RECORDS RECEIVED AND WELL STATUS

Company American Hunter Well No. "Souza" 1

API No. 019-21924 Sec. 36 , T. 14 , R. 12 , ______ B.&M.

County ______ Field ______

RECORDS RECEIVED	DATE
Well Summary (Form OG100)	✓
History (Form OG103)	✓
Core Record (Form OG101)	
Directional Survey	
Sidewall Samples	✓
Other	
Date final records received	
Electric logs:	

STATUS		STATUS	
Producing - Oil		Water Disposal	
Idle - Oil		Waterflood	
Abandoned - Oil		Steamflood	
Drilling - Idle		Fire Flood	
Abandoned - Dry Hole	✓	Air Injection	
Producing - Gas		Gas Injection	
Idle - Gas		CO_2 Injection	
Abandoned - Gas		LPG Injection	
Gas-Open to Oil Zone		Observation	
Waterflood Source			

DATE ______ "E" well Yes ☐ No ☐

RECOMPLETED ______

REMARKS ______

ENGINEER'S CHECK LIST

1. Summary, History, & Core record (dupl.) ✓
2. Electric Log ✓
3. Operator's Name ✓
4. Signature ✓
5. Well Designation ✓
6. Location ✓
7. Elevation ✓
8. Notices ✓
9. "T" Reports ✓
10. Casing Record ✓
11. Plugs ✓
12. Surface Inspection 11-1-84 TSB 4-7-85
13. Production -
14. E Well on Prod. Dir. Sur. -

CLERICAL CHECK LIST

1. Location change ____ (F-OGD165) ______
2. Elevation change ____ (F-OGD165) ______
3. Form OGD121 ✓ 1/29/86
4. Form OG159 (Final Letter) 1/29/86
5. Form OGD150b (Release of Bond) ______
6. Duplicate logs to archives ______
7. Notice of Records due(F-OGD170) ______
8. EDP (F-OGD42A-1, 2) ______

Nat Gamma Ray 1 ✓
High Res Dipmeter 1 ✓
DIL/SFL Elec prop 1 ✓
with Den-comp neut. 1 ✓
Cyberlook 1 ✓ 2 + 5
DIL/SFL 1 ✓
Borehole com/sonic 1 ✓
microlog 1 ✓
Borehole com/sonic 1 ✓ 5" + 2
mud log 1 ✓
Sidewall Sample Log 1 ✓
Nat Gamma Run 1 ✓
DIL 2 + 5 ✓

~~Need Duplicate copies~~

See Attached

RECORDS NOT APPROVED
Reason:
~~Needs Surf Insp.~~ surf ok 11/1/84 TSB
~~Needs Duplicate logs~~

RECORDS APPROVED GWM 10-16-85

RELEASE BOND /

Date Eligible ______
(Use date last needed records were received.)

MAP AND MAP BOOK ⌖ W 3-8 GWM 10-16-85

83-10217

OGD2 (12/82/DWRR/5M)

LONG BEACH OFFICE - USE REVERSE SIDE

CHECK L[illegible] - RECORDS RECEIVED AND WELL S[illegible]US

Well No. _____

API No. _____ Sec. _____, T. _____, R. _____, _____ B.&M.

WORK PERFORMED	STATUS	DATE
Drill____ Redrill____ Deepen____	Producing_____ "E" well Yes☐ No☐	
Plug____ Alter Casing____	Recompleted Producing_____	
Waterflood____ Water Disposal____	Waterflood _____	
Abandon____	Water Disposal_____	
Other_____	Abandoned_____	
	Other_____	
	MAP AND BOOK_____ Engineer_____	

RECORDS FILED AND DATE Clerk____

Summary_____

Log and Core_____

History_____

E-log_____

_____

Directional Survey_____

Other_____

(Check records for signature and correct name of operator or well, section, township, range, and field.)

Location_____ Notice states_____

_____

_____

_____

_____

Elevation_____ Notice states_____

_____

_____

_____

Production Reports_____

_____

(If production reports not received, make notation and inform Senior Stenographer when received.)

RECORDS & REQUIREMENTS CHECKED Engineer____

_____

_____

_____

_____

_____

_____

_____

Surface Inspection_____

Data Needed_____

Request Records_____ OGD170____

Correct records_____ OGD165____
(Specify)

EDP_____ (OGD42A-1, 2) ____

CARDS_____

BOND_____

Hold____ Reason_____

Release____ Date Eligible_____ OGD150____

End premium year ____
Release requested ____
Bond superseded ____ (Check One)
Well abandoned ____

Environmental Inspection_____ Engineer____

FINAL LETTER_____ OG159____
and
File cleared _____ OGD121____

OGD2 (LONG BEACH)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

RECEIVED
JUL 13 1984
DIVISION OF OIL & GAS
COALINGA

API No. 019-21924

WELL SUMMARY REPORT

Operator	Well				
AMERICAN HUNTER EXPLORATION LTD.	SOUZA #1				
Field	County	Sec.	T.	R.	B.&M.
- - - - -	Fresno	36	14S	12E	M.D.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
657.38' East along section line
and 654.18' North at right angles to said line from S/4 Sec. 36

Elevation of ground above sea level
423.8 ft.

Commenced drilling (date): 83-11-04
Completed drilling (date): 83-12-13
Commenced producing (date): N/A
☐ Flowing ☐ Pumping ☐ Gas lift
Name of producing zone(s): N/A

Total depth: (1st hole) 10,217' (2nd) (3rd)

Present effective depth: WELL ABANDONED

Junk: N/A

Note: 12 1/4" hole - 1709'
8 3/4" hole - T.D.

Depth measurements taken from top of: ☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 26 feet above ground

GEOLOGICAL MARKERS	DEPTH
See Attachment #1	

Formation and age at total depth: Lathrop

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	N/A					
Production After 30 days	N/A					

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
9 5/8"	Surface	1709'	36#	K55, LT&C	New	12 1/4"	459 cu.ft. lead slurry 337 cu.ft. tailed	
5 1/2"	Surface	10213'	20#	AC-80, LT&C	New	8 3/4"	1532 cu.ft. lead slurry 755 cu.ft. tailed	

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

See Attachment #2

Was the well directionally drilled? If yes, show coordinates at total depth
☐ Yes ☒ No

Electrical log depths: See Attachment #3

Other surveys

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Don L. Myers	Senior Drilling Engineer	
Address	City	Zip Code
500, 435 Fourth Avenue S.W.	Calgary, Alberta, CANADA	T2P 3A8
Telephone Number	Signature	Date
(403) 260-1740	D L Myers	July 5/84

OG100 (3/82/GSR1/5M)

SUBMIT IN DUPLICATE

WELL SUMMARY REPORT

Attachment #1

Souza #1 - Fresno County, California

FORMATION TOPS (KB 452)

Formation	Sample top	E-log top	Sub-sea (E-log)
	(Spud in Quaternary beds)		
Pliocene	(In surface hole)		
Miocene(?)	2578	2574	- 2122
Kreyenhagen	2977	2992	- 2540
Domengine	3654	3655	- 3203
Glauconitic	4185	4192	- 3740
Upper Dos Palos	4596	4598	- 4146
Cima	4658	4662	- 4210
Lower Dos Palos	5126	5130	- 4678
Dosados	5906	5909	- 5457
Blewett (moreno)	6512	6512	- 6060
Ragged Valley	7341	7342	- 6890
Tracy	7435	7440	- 6988
Sawtooth	7987	7990	- 7538
Lathrop	9156	9157	- 8705
Total Depth	10,217 (Driller)	10,212 (Logger)	

LOGGING SUMMARY (Logging by Schlumberger)

RUN NO. 1 (at 7332')

Dual Induction - SFL	7298 - 1709
BHC Sonic Log	7304 - 145
Litho-Density - Compensated Neutron	7304 - 145

History of Oil or Gas Well
Attachment #1
Drilling History

RECEIVED
JUL 13 1984
DIVISION OF OIL & GAS
COALINGA

DRILLING HISTORY

AMERICAN HUNTER/SOUZA #1 SW 1/4, SE 1/4, SEC 36, T14S, R12E MDB & M FRESNO CO CALIFORNIA

83-11-03		Rigging up. Rig to raise derrick. Estimate spud tomorrow - P.M.	(MONT. 19)
83-11-04		Rig to Spud. Rigging up - 18 hrs.	(MONT. 19) (63,289)
83-11-05 (1)	1602 Ft Surface	SPUD TIME: 08:30 Hrs 83-11-04 Progress: 1602 Ft.	(MONT #19) (71,374)
83-11-06 (2)	1652 Ft Surface	Wait on Casing. Progress: 50 Ft	(MONT # 19) (78,612)
83-11-07 (3)	1709 Ft Surface	W.O.C. Progress: 57 Ft Run 44 jts, 9 5/8" 36#, K-55, LT&C casing. Cemented w/ 82 bbls 2:1:2 poz, tailed in w/ 60 bbls "G" + 2% $CaCl_2$. Plug down Time: 01:30 Hrs 83-11-07. Total Length of csg run 1713 '. Set @ 1709' KB.	(MONT # 19) (99,972)
83-11-08 (4)	1731 Ft Surface	Drilling Progress: 22 Ft	(MONT. 19) (109,486)
83-11-09 (5)	2809 Tremblay	Drilling Progress: 1078 2339 - 1 1/4°	(MONT. 19) (159,532)
83-11-10 (6)	4004 Ft Eogene	Drilling Progress: 1195 Ft	(MONT. 19) (169,460)
83-11-11 (7)	4911 Ft C/Sand	Drilling. Progress: 907 Ft	(MONT. 19) (183,948)
83-11-12 (8)	5758 Ft M/Shale	Drilling. Progress: 847 Ft 5661 - 1°	(MONT. 19) (193,450)
83-11-13 (9)	6061 Ft M/ Shale	Ream to Bottom Progress: 303 Ft 6061 - 2°	(MONT. 19) (207,230)
83-11-14 (10)	6249 Ft Dosado/S	POH for DST. Progress: 188 Ft	(MONT. 19) (217,811)

DRILLING HISTORY

AMERICAN HUNTER/SOUZA #1 SW 1/4, SE 1/4, SEC 36, T14S, R12E MDB & M FRESNO CO CALIFORNIA

83-11-15 (11) 6373 Ft Bluitt
Circ. sample
Progress: 124 Ft
DST # 1: (6249 - 6202) 10/60/90/180
Results to follow.
(MONT. 19)
(228,763)

83-11-16 (12) 6373 Ft Bluitt
RIH with bit.
Progress: Nil
6373 - 2°
(MONT. 19)
(242,579)

DST # 1: (6201.5' - 6249') 10/60/90/180
PF: Strong air blow - NGTS
ISI: GTS after 10 mins. 5' flare
VO: GTS immediately - 6' flare, decreasing to 1' flare in 25 mins and steady - Charts show plugging.
REC: 5' thick drilling mud

IHP	3003 PSI	PFP	22 - 22 PSI	ISIP	1506 PSI
	3003	FP	22 - 22		1506

DST # 2: (6308' - 6373') 10/60/60/120
PF: GTS - 4 mins, est. 750 MCF
VO: GTS immediately - max. 682 MCF, levels off to 435 MCF - stabilized.
REC: 15' thick slighly gassy cut drlg mud.

IHP	3108 PSI	PFP	208 - 167 PSI	ISIP	2747 PSI
	3108		146 - 62		2641

Charts show slight plugging.
BHT: 152° F

83-11-17 (13) 6512 Ft. Bluitt
POH with DST # 3
Progress: 139 Ft.
6512' - 2°
DST # 3: 6463' - 6512' 10/60/90/180
Results to follow.
(MONT. 19)
(252,041)

DST # 3:6463'- 6512' 10/60/90/180
PF: GTS - 4 mins, 15-20' flare, est. 400 MCF descreasing to 10' at end.
VO: 10' flare decreasing to 3' in 40 mins - stabilizing
REC: Nil

PF	66 - 55	IHP	3183	ISIP	1195
FF	22 - 22		3183		1195

BHT - 162° F
Charts indicated plugging.

DRILLING HISTORY

AMERICAN HUNTER/SOUZA #1 SW 1/4, SE 1/4, SEC 36, T14S, R12E MDB & M FRESNO CO CALIFORNIA

83-11-18 (14)	6915 Ft Bluitt	Drilling Progress: 403 Ft	(MONT. 19) (264,159)
83-11-19 (15)	7286 Ft Bluitt	Drilling Progress: 371 Ft 6940 - 1 1/2° BGG - 20 units	(MONT. 19) (281,755)
83-11-20 (16)	7332 Ft D/Valley	Ream to Btm. Progress: 48 Ft 7332 - 2°	(MONT. 19) (317,933)
83-11-21 (17)	7699 Ft Tracy	Drilling Progress: 367 Ft	(MONT. 19) (326,396)
83-11-22 (18)	8080 Ft SWTH/Sh	Drilling Progress: 381 Ft BGG - 20 units.	(MONT. 19) (337,108)
83-11-23 (19)	8525 Ft SWTH/Sh	Drilling Progress: 445 Ft 8402 - 2°	(MONT. 19) (347,476)
83-11-24 (20)	8615 Ft. SWTH/Sh	Wash to bottom. Progress: 90 Ft. 8615 Ft - 2°	(MONT. 19) (359,091)
83-11-25 (21)	8730 Ft Sawtooth	POH. Progress: 115 Ft	(MONT. 19) (371,759)
83-11-26 (22)	8815 Ft Sawtooth	Drilling. Progress: 85 Ft 8730' - 2°	(MONT. 19) (386,589)
83-11-27 (23)	9019 Ft Sawtooth	Drilling Progress: 204 Ft	(MONT. 19) (395,574)
83-11-28 (24)	9159 Ft Lathrop	POH to core Progress: 140 Ft	(MONT. 19) (405,333)
83-11-29 (25)	9200 Ft Lathrop	POH w/ DST Progress: 41 Ft CORE # 1: Lathrop 9159' - 9200' Rec: 40 1/2' Core. 9159' - 2°	(MONT. 19) (416,024)

DRILLING HISTORY

AMERICAN HUNTER/SOUZA #1 SW 1/4, SE 1/4, SEC 36, T14S, R12E MDB & M FRESNO CO CALIFORNIA

83-11-30 (26)	Lathrop 9200 Ft	POH w/Test tools. Progress: Nil DST # 4: 9156' - 9200' (Lathrop Sand) PF WAB - inc. SAB Lost packer seat in 2 mins Used and recovered 1200' water cushion & 523' drlg. mud. DST # 5: 9160' - 9200' (Lathrop Sand) Used 2000' water cushion Bottom hole conventional PF: Lost packer seat immediately, attempt to reset, lost packer seat again.	(MONT. 19) (426,089)
83-12-01 (27)	9317' Lathrop	Circ. sample Progress: 117'	(MONT. 19) (439,527)
83-12-02 (28)	9433' Lathrop	Pick up DST # 6. Progress: 116 Ft. DST #5: Used and rec. 2000' water cushion IHP 5287 PSI 5213 Misrun, lost packer seat immediately.	(MONT. 19) (450,672)
83-12-03 (29)	9480 Ft Lathrop	Drilling Progress: 47 Ft DST # 6: 9382' - 9433' (M/Lathrop) Used 2700' water cushion 10/60/75/180 PF: VWAB VO: NGTS Rec. 2700' Water Cushion 2700' Gassy cut water cushion 150' Thick drlg mud (smells gassy) PF 1287 PSI IHP 5535 PSI ISIP 4460 PSI IF 1287 PSI 5424 4664 1287	(MONT. 19) (469,803)
83-12-04 (30)	9726 Ft Lathrop	RIH to Core. Progress: 246 Ft. 9689' - 3 3/4° CORE # 2: 9726' - 9778' (L/Lathrop) Cut 54' Rec - 45'	(MONT. 19) (478,458)
83-12-05 (31)	9778 Ft Lathrop	POH w/test tools. Progress: 52 Ft DST # 7: Results to follow.	(MONT. 19) (488,584)

DRILLING HISTORY

AMERICAN HUNTER/SOUZA #1 SW 1/4, SE 1/4, SEC 36, T14S, R12E MDB & M FRESNO CO CALIFORNIA

83-12-13 (39)	10,217' TD	Tear out BOP's Progres: Nil Ran 257 jts 5 1/2", AC-80, 20#, LT&C csg. Landed @ 10,213'KB. Followed by 1532 cu ft. + .8% D-60, + .3% D-13, +.3& D46, followed by 755 cu ft. + .2% D-46 + .2% D-60. PDT: 0310 Hrs 83-12-13.	(MONT. 19) (830,653)
83-12-14 (40)		Tear out BOP's and cut casing. RIG RELEASE: 16:00 Hrs 83-12-13 STATUS: POTENTIAL GASWELL	(MONT. 19) (851,516)

History of Oil or Gas Well
Attachment #2
Completion History

AMERICAN HUNTER SOUZA # 1

84-03-30 (1)	Rigging up. Move in rig and equipment. Rigging up.	(GAMACHE # 1) (7,180)
84-03-31 (2)	Run tubing. Finish rigging up. Unload 2 3/8" N80 tubing. Cut off casing. Install BOP. Fill tanks with 800 bbls fresh water.	(GAMACHE # 1) (51,517)
84-04-01 (3)	Run tubing. RIH with 25 joints 2 3/8" tubing with 4 5/8" bit. Reverse out drilling mud with fresh water. High winds and heavy rain.	(GAMACHE # 1) (56,434)
84-04-02 (4)	Run tubing. RIH with bit to 8400'. Circulate out drilling mud with fresh water every 1000'.	(GAMACHE # 1) (60,232)
84-04-03 (5)	RIH with scraper. RIH with bit to 10165'. Break circulation every 6 joints below 9000'. Circulate down to PBTD at 10177'. Circulated out thick drilling mud. POH. RIH with bit and scraper on 40 jts tubing. Gray oil tool arrived with primary seal. POH. Pick up BOP and tubing spool. Install primary seal and tubing seal. Pressure seals to 5000 PSI. Held good.	(GAMACHE # 1) (63,708)
84-04-04 (6)	Logging. RIH with bit and scraper to PBTD. Displace to 3% KCL. POH. Rig Schlumberger. Run CBL-VDL-CNL-GR log from PBTD to 2400 ft.	(GAMACHE # 1) (68,198)
84-04-05 (7)	Run tubing. Ran CBL-VDL log at 1700 psi from PBTD to 2400 ft. Ran CET-GR-CCL log and TDT logs from PBTD to 2400 ft. Bond logs inidcate no cement behind casing.	(GAMACHE # 1) (71,909)
84-04-06 (8)	Pressure test casing. RIH to PBTD with tubing. Haul in chemicals to mix mud.	(GAMACHE # 1) (110,073)
84-04-07 (9)	Displace to mud. Mix 400 bbls 9.2 lb/gal mud.	(GAMACHE # 1) (113,633)

AMERICAN HUNTER SOUZA # 1

84-04-08 (10)

Est. circ between perfs. (GAMACHE # 1)
Pressure test casing to 5000 psi for 15 mins. Held O.K. Displace hole to 11.2#/gal gel mud. POH w/tbg. Fill hole. Perforate intervals 10060 - 10061 and 9870 - 9871' w/ 4" HSC casing gun @ 90° phasing w/ big hole charges @ 4 SPF. RIH with 4 jts tubing, retrievable packer and 2 3/8" tubing. Set packer @ 9915' KB. Pump down tubing @ 1/6 BPM @ 3000 psi w/returns up annulus. Pump 1/2 bbl. S.I.F.N. (124,143)

84-04-09 (11)

Run tubing and stinger. (GAMACHE # 1)
Pump mud down annulus and up tubing starting @ 1/6 BPM @ 3300 psi. Pump total of 95 bbls. Final rate of 3/4 BPM @ 2800 psi. Recovered small amounts of gas and solids. No loss to formation. Unseat packer and lower tail pipe to 10112' KB. Reverse circ hole clean w/ 50 bbls mud. POH w/tubing and packer. Rig Schlumberger and set EZ drill cement retainer @ 10056' KB. Pick up stinger and RIH w/ 206 jts tubing. S.I.F.N. (130,270)

84-04-10 (12)

Running free point. (GAMACHE # 1)
Finish RIH w/tubing and stinger. Stab retainer and pressure test to 1000 PSI. Est. circ rate of 3/4 BPM @ 1800 PSI w/8 bbls mud. Rig Howco to cement w/65 sxs Class "G" + 30% silica flour + 5% KCL + 1/4#/sxs D-Air + 0.1% HR-7 + 0.75% FDTC - 322. Pull out of retainer. Circ 10 bbls mud flush, 17.7 bbls slurry, 2 bbls fresh water and 7 bbls mud to bottom of tubing. Stab retainer and displace w/27.5 bbls mud @ 1 BPM @ 3000 PSI. Bleed off tubing and casing pressure. Pull out of stinger and pull 10 jts tubing to 9745'KB. Reverse circ clean w/61 bbls mud. Recovered 11 bbls cement. Start cement @ 1205 hrs. Finish reverse circ @ 1350 hrs. Attempt to pull tubing. Would not move. Work tubing - no movement. Circ mud for 30 mins @ 1.5 BPM @ 1200 PSI for 3 hrs. Pull tubing to 80,000# - no movement. Land tubing in slips and pressure casing to 500 PSI. S.I.F.N. (137,136)

84-04-11 (13)

Bleed off 500 PSI wellhead pressure. Rig Schlumberger and run free point tool. Found free point @ 9360'KB. Reverse circ hole to fresh water. SIFN. (145,456)

84-04-12 (14)

Pull tubing. (GAMACHE #11)
Rig Halliburton and circ 750 gals 15% HCL + inhibitor down tubing and up casing annulus. Wash acid past tubing by alternately pumping down tubing and casing. Work tubing, no movement. Backwash acid w/fresh water. Acid partly spent w/ small volume of acid gas. Rig McCullough and cut tubing @ 9355' KB w/ chemical cutter. Pull tubing w/drag on first joint then pulled free. Pull 200 jts tubing. SIFN. (154,516)

AMERICAN HUNTER SOUZA # 1

84-04-13 (15)

Pull washover pipe. GAMACHE#11)
Pull remainder of tubing and lay down cut off joint. Pick up 4" washover mill and 217' of 4" x 3 3/8" washpipe, jars, bumper sub and RIH on 2 3/8" tubing. Tag obstruction @ 8936' KB. Rig Power Swivel and mill out cement stringers to 9226' KB. Pipe torquing up. Circ. hole clean. Start POH w/washover pipe. (158,676)

84-04-14 (16)

Washing over tubing. (GAMACHE#11)
POH with remaining tubing and washpipe. Pick up 4 5/8" bit and RIH to 9226' KB. Rig up power swivel and ream out cement to top of fish at 9355' KB. Circulate hole clean. POH with tubing and bit. Pick up washover mill, 245' washpipe, jars and bumper sub and RIH to 9355' KB. Rig up power swivel and washover fish to 9460' KB. Fine ground cement returns. (165,250)

84-04-15 (17)

POH with washpipe.
Washover fish to 9600' KB. Circulate clean. POH with tubing and washpipe. Pick up tubing cutter and grapple and RIH with tubing. Made cut at 9572' KB. POH and lay down 7 joints tubing and 2 cut off stubs. RIH with washover mill and washpipe to 9600' KB. Washover fish to 9745' KB. No progress in 20 mins. Should be at top of cement stinger. Circulate hole clean. (170,790)

84-04-16 (18)

Drilling on cement retainer.
POH with tubing and washpipe. Pick up overshot. RIH and latch fish at 9572' KB. POH with tubing and overshot and recovered 6 joints tubing and retainer stinger. Pick up 4 5/8" bit, six 3 1/2" drill collars. RIH and tag cement at 9745' KB. Drill through cement to 9885' KB. Pressure test upper perfs to 2000 psi. Held O.K. Run down and tag cement at 10,051' KB. Drill through cement and tag retainer at 10,056' KB. Drill on retainer. (176,150)

84-04-17 (19)

Rigging out Schlumberger. (GAMACHE # 11)
Drill out cement retainer and cement to 10,062'KB. Clean out to 10,177'KB. Circ hole clean. Pull tbg and lay down DC's. Pick up casing scraper and RIH to 10,177'KB. Work scraper from 8920 - 10,070'KB. PT csg to 2000 PSI. Held O.K. Displace hole to 3% KCL water. POH. Rig Schlumberger and run CBL-VDL-CCL and CET-CCL from PBTD to 9200'KB. Made 2 passes with zero pressure and 2000 PSI (181,510)

AMERICAN HUNTER SOUZA # 1

84-04-18 (20)	Lathrop	Pull FWG plug. (GAMACHE #11) Pick up Van gun assembly, firing head, 4' x 2 3/8" pup, 2 3/8" tubing release w/1.81" latch, 10' x 2 3/8" pup, 1.81 "F" nipple, 2 3/8" x 10' pup, 2 3/8" x 10' pup, 2 3/8" flow disc assembly, Brown Hughes M-1 packer, 2 3/8" x 2' pup, Baker EL-2 on-off tool w/1.875 profile w/blanking plug in place, 1 jt 2 3/8" tubing, RA Marker Collar, 6' pup and RIH w/ 2 3/8" tubing and space out pups. Position gun wSchlumberger GR tool. Set packer in 9000# compression. Re-check position w/GR tool. Release and re-set packer @ 9924' KB w/gun positioned to perforate Lathrop formation inervals 10,035 - 10,045', 10,014' - 10,026', 9990 - 9999', 9975 - 9986', 9967 - 9971'. Pressure test packer to 500 psi. Held O.K. Remove BOP's and install wellhead. Rig Baker to pull FWG plug. (221,742)
84-04-19 (21)	Lathrop	Assemble guns. (GAMACHE#11) Pull equalizing prong and Mandril from EL-2 profile @ 9920' KB. Drop detonating bar to fire guns. No positive indication of firing. Slight air blow up tubing. PT annulus. Circ hole @ 1.5 BPM @ 200 PSI. Indication of packer failure. Rig wireline and attempt to pull detonating bar. No success. Install BOP's. Unseat packer and POH. Top 3 sections of gun fired at low order detonation. Bottom 2 did not fire. Order new guns, install new FWG plug in El-2 on-off connector. Redress packer.
84-04-20 (22)	Lathrop	Rig up braided line. GAMACHE# 11) RIH w/ new gun assembly, 2 3/8" x 10' pup, 2 3/8" x 4' pup, tubing release, 2 3/8" x 4' pup, 1.81 "F" nipple, 1 jt 2 3/8" tbg. Fill disc assembly, M-1 packer, 2 3/8" x 2' pup, EL-2 on-off tool with FWG plug in place, 1 jt 2 3/8" tubing, RA marker collar, 2 3/8" x 6' pup on 2 3/8" tubing. Position gun with Schlumberger. Set packer @ 9905' KB. Re-check depth with wireline. O.K. PT annulus to 500 PSI. O.K. Install wellhead. Rig Baker and pull equalizing prong from FWG plug. RIH and latch plug. Unable to pull plug. Attempt to shear from pulling tool. W/L parted @ surface. Fish wire and drop cutter bar to cut @ rope socket. Rig out slick line. (234,397)
84-04-21 (23)	Lathrop	Pulling tubing. (GAMACHE#11) Rig up braided line. RIH and recover cutter bar. RIH and latch FWG plug. Jarred for 3 hrs. Unable to pull plug. Pulled out of rope socket and rig out braided line. Remove WH and install BOP's. Unseat packer. POH w/tubing and assembly. Dogs on FWG plug were broken. RiH w/open ended tubing to PBTD. Rig Howco N_2 unit and blow hole dry w/N_2. Start POH w/tubing. (247,898)

AMERICAN HUNTER SOUZA # 1

84-04-22 (24)	Lathrop	Swabbing. (GAMACHE#11) 0800 hrs (10 hrs S.I.). No measurable pressure on wellhead. Bleed off - very light gas flare to pit. Well dead. Pick up and RIH w/the following: 1.79 Otis "XN" nipple, 1 jt tubing, 1.87 Otis "X" nipple, 2 3/8" x 4' pup, M-1 packer, 2 3/8" x 2' pup, Otis tubing seal divider w/1.87 profile and 2 3/8" tubing to surface. Set packer @ 9902.6' KB w/XN nipple @ 9940.3'KB. Fill annulus w/3% KCL water and PT to 500 PSI for 30 mins. Held O.K. Rig to swab. IFL @ 8600'KB. Pulled 2 swabs to 9890' to recover 3 bbls mud and muddy water. FFL @ 9600'. S.I. @ 1400 hrs. (260,310)
84-04-23 (25)	Lathrop	Swabbing. (GAMACHE#11) 0700 hrs (17 hrs S.I.) No measurable pressure on Wellhead. Rig to swab. IFL @ 8300'. Pulled 3 swabs over 9 hrs to recover 6 bbls water. No gas flow. Salinity by refractometer 9600 PPM. S.I. @ 1700 hrs. (263,190)
84-04-25 (26)	Lathrop	Swab testing. (GAMACHE #11) 0700 hrs (14 hrs S.I.) No measurable pressure on wellhead. Rig to swab. IFL @ 8950'. Swab total of 6 bbls water throughout day. No gas flow. FFL @ 9875'. Total new fluid recovered 15 bbls. S.I. @ 1700 hrs. (265,750)
84-04-26 (27)	Lathrop	Swab testing. (GAMACHE#11) 700 hrs 14 hrs S.I.) SITP 15 PSI. Bleed off gas head. Rig to swab. IFL @ 9500' KB. Swab a total of 3.1 bbls water throughout day. FFL @ 9800'KB. Total new water swabbed to date: 18.1 bbls. S.I. @ 1700 hrs. (268,310)
84-04-27 (28)	Lathrop	Running tbg ostinger. (GAMACHE#11) 0700 hrs (14 hrs S.I.) SITP: 10 psi. Bleed off and rig to swab. IFL @ 9000'. Pull 2 swabs to recover 1 bbl water. FFL @ 9400'. Fill tbg w/ KCl water. Press tbg to 4500 psi. No feed. Remove wellhead and install BOP's. Unseat packer and POH w/ tubing and packer. Rig Schlumberger and set EZ drill cement retainer @ 9862'KB. SIFN. (271 070)

AMERICAN HUNTER SOUZA # 1

84-04-28 (29)	Lathrop	Running tubing and packer. (GAMACHE #11) Pick up stinger and RIH on 2 3/8" tubing. Stab retainer and Rig Howco and establish feed rate of 1 BPM @ 8200 PSI w/3 bbls water. Pull out of retainer and batch mix 50 sxs cement. Circ. to bottom and sting into retainer. Squeeze 6 bbls cement to perfs to max. pressure of 9000 PSI. Bleed off to 4000 PSI and pull out of retainer. Backwash excess cement. Rig in N_2 unit and blow hole dry. POH w/ tubing and stinger. Rig Schlumberger and perforate the following w/4" csg gun @ 2 SPF: 9828 - 9832', 9821 - 9826', 9816 - 9819', 9798 - 9811', 9784 - 9791', 9768 - 9783', 9740 - 9752', 9723 - 9735', 9707 - 9712', 9698 - 9705'. Total of 172 shots. Slight air blow after perforating. S.I. well @ 2400 hrs. (298,353)
84-04-29 (30)	Lathrop	Swab testing. (GAMACHE#11) 0700 hrs (7 hrs S.I.) SIWHP 5 PSI. Bleed off gas head to pit. Pick up and RIH w/ the following" 1.79 Otis "XN" nipple, 1 jt 2 3/8" tubing, 1.875 Otis "X" nipple, 2 3/8" x 4' pup, Otis Permalatch packer, 2 38" x 2' pup, 1.87 tubing seal divider on 2 3/8" tubing. Set packer @ 9630' KB w/ "XN" nipple@ 9672.5 m, "X" nipple @ 9640.0' KB, tubing seal divider @ 9625.8' KB. Fill annulus and PT packer to 500 PSI for 30 mins. Held O.K. Rig to swab. IFL @ 6800' KB. Pulled 7 swabs over 3 hrs to recover 21 bbls gas cut water. FFL @ 9200'. Salt content by refractometer 9600 PPM. S.I. @ 1700 hrs. (304,127)
84-04-30 (31)	Lathrop	Swab testing. (GAMACHE #11) 0700 hrs no pressure on W.H. Rig to swab. IFL @ 3800' KB. Swab total of 34.7 bbls formation water throughout day. 9600 PPM salt by refractometer. Slight trace of gas breaking out of water. FFL @ 9400'. S.I. @ 1700 hrs. Total New Fluid Recovered: 55.7 bbls. (306,687)
84-05-01 (33)	Lathrop	Pressure test bridge plug. (GAMACHE #11) 0700 hrs SITP 5 PSI. Rig to swab. IFL @ 4300'. Pull 5 swabs to recover 18.5 bbls formation water. Total new fluid recovered: 74.2 bbls. Fill tubing and establish feed rate of 0.2 BPM @ 4000 PSI. Pressure bled to 2500 PSI in 3 mins. Unseat packer and POH. Rig Schlumberger and set bridge plug @ 9670' KB. SIFN. (309,247)

AMERICAN HUNTER SOUZA # 1

84-04-02 (34)	Lathrop	Circ. hole. (GAMACHE#11) Press test BP to 5000 psi for 15 mins. Held OK. Rig Schlumberger and perforate intervals 9467 - 68 and 9351 -52 w/4" HSC csg gun @ 90 degrees phasing, Big hole charges @ 5 shots/interval. Pick up retrievable packer and RIH on 2 3/8 tbg. Circ hole to 3% KCL water. Set packer @ 9375'KB . Break circ down tbg @ 2500 psi. Attempt to circ down annulus w/no success. Re-establish circ down tbg @ 2.1 - 2.8 BPM @ 2500 - 3000 psi. Circ. hole for 6 hrs until clean. Recovered sand, shale, and cement. Unseat packer and pull above top perfs. SIFN (314,687)
84-05-03 (35)	Lathrop	0700 hours SIWHP: 1100 psi. Bleed off to recover 1/2 BBL water. Circ hole clean. POH w/ tbg & packer. Rig Schlumberger & set cement retainer @ 9460' KB. Pick up stinger & RIH w/tbg & stab into retainer & establish circ. Mix 50 sxs cement (13.3 BBLS slurry) & displace between 2 sets of perfs w/KCl water @ 3.5 BPM @2800 psi. Pull out of retainer to 9210' KB & backwash excess cement. Pull tbg to 8960' KB & press up wellbore to 2000 psi. S.I. well. (334,129)
84-05-04 (36)	Lathrop	0700 hours SIWHP: 1300 psi. Bleed off & POH w/tubing and stinger. Pick up 4 5/8" bit and drill collars and RIH to tag top of cement @ 9226'KB. Rig up power swivel and drill out cement and stringers to top of retainer @ 9460' KB. Circ hole clean. Press test upper perfs to 2500 psi. Held O.K. SIFN. (337,289)

AMERICAN HUNTER SOUZA # 1

84-05-05 (37) Lathrop

Running tubing.
0700 hrs SIWHP: 1350 psi. Bleed off to recover 1 bbl KCl water. POH w/ tubing & lay down DC's. Press test upper perfs (9351-52) to 5000 psi. Press bled off to 4800 psi in 15 mins. Pick up bit & csg scraper & RIH to top of retainer @ 9460'KB. Reverse circ hole clean. POH w/ tbg & scraper. SIFN. (340 349)

84-05-06 (38) Lathrop

RIH w/ seal assembly.
0700 hrs SIWHP: 600 psi. Bleed off water head & RIH w/ 2 3/8" tbg to 9457'KB. Rig up Howco N_2 unit & blow hole dry w/ N_2. POH w/ tbg. Rig Schlumberger and perforate Lathrop interval 9380-9423 w/ 4" HSC csg gun @ 2 SPF. Total of 86 shots. 5 min air blow after shooting lower 23' and 5 min air blow after shooting upper 20'. Pick up 1.79 Otis "XN" nipple, 2 3/8 x 10' pup, 2 3/8 x 4' pup, Otis permatrieve packer & set packer on W/L @ 9357'KB. "XN" nipple @ 9378'KB. SIFN. (360 690)

84-05-07 (39) Lathrop

Swabbing.
0800 hrs no press on WH. RIH w/ Otis anchor seal assembly 6' x 2 3/8 pup, tubing seal divider w/ 1.875 "X" profile. Latch packer, space out and land dognut. Fill annulus w/ 150 bbls water & press test to 500 psi for 15 mins. Held OK. Rig to swab. IFL @ 8550'KB. Pulled 2 swabs from 9350 to recover 1.75 bbls water. FFL @ 9000'. S.I. @ 1600 hrs. No trace of gas. (363 609)

84-05-08 (40) Lathrop

Swabbing.
0700 hrs SITP: 0 psi. Rig to swab. IFL @ 6460'KB. Pulled 9 swabs throughout day from 9350'KB to recover 12.5 bbls water. Trace of gas with swabs. FFL @ 8200'. Difficulty swabbing dry due to swab cups wearing out. Water salinity by refractometer 9600 ppm. Total new fluid recovered 14.25 bbls. S.I. @ 1700 hrs. (366 709)

84-05-09 (41) Lathrop

Swabbing.
0700 hrs SITP: 25 psi. Rig to swab. IFL @ 6600' K.B. Pulled 9 swabs over 9 1/2 hrs from 9330' K.B. to recover 7.5 bbls water. Trace of gas w/ swabs. FFL @ 8600' K.B. S.I. @ 1700 hrs. New mluid recovered: 21.75 BBLS. (369,809)

84-05-10 (42) Lathrop

Swabbing.
0700 hrs SITP: 10 psi. Bleed off and rig to swab. IFL: 7920'KB. Pulled 5 swabs over 10 hrs from 9330'KB to recover 3.75 bbls water. FFL @ 9000'KB. Total new fluid recovered 25.5 bbls. S.I. @ 1700 hrs. (372,709)

AMERICAN HUNTER SOUZA # 1

84-05-11 (43) Lathrop

Pull tubing.
0730 hrs no measurable pressure on wellhead. SICP remaining @ 170 psi. Bleed off annular pressure. Fluid at surface. Re-test to 500 psi. No leak off. Rig to swab. IFL @ 7920'KB. Swab total of 3.75 bbls water throughout day. FFL @ 9100'KB. Total new fluid swabbed: 29.25 bbls. Fill tubing with KCl water. Pressure tubing to 4500 psi. Annular pressure started increasing indicating we have broken down cement between main perfs and upper squeeze perfs @ 9350-51'. Bleed off pressure and prepare to pull tubing. (375,709)

84-05-12 (44) Lathrop

Cement squeeze.
Pull anchor seal assembly from packer & POH. RIH w/ packer releasing stinger to top of packer. Circ hole, latch packer & unseat & POH w/ packer and tailpipe. Rig Schlumberger & set EZ drill cement retainer @ 9340'KB. PT to 3000 psi. Pick up stinger & RIH w/ 2 3/8" tbg. SIFN. (384 509)

84-05-13 (45) Lathrop

Perforating.
Sting into retainer @ 9340'KB. Est. feed rate of 1 BPM @ 5800 psi. Pull out of retainer. Mix 50 sxs cement - total of 10 bbls slurry - circ cement to bottom of tbg & sting into retainer. Pump 5 bbls slurry @ 1 BPM @ 6100 psi. Stage squeeze 1 bbl slurry to standing pressure of 6500 psi. Pull out of retainer and backwash excess slurry. Rig Howco N_2 unit & blow hole dry w/ N_2. POH w/ tbg. (394 649)

84-05-14 (46) Lathrop

Pulling tbg & packer.
Rig Schlumberger & perforate Lathrop intervals 9192-9199, 9182-9185, 9159-9176'KB w/ 4" HSC csg gun @ 2 SPF. Total of 57 shots. Weak air blow after shooting 9192-99 & 9182-85 and fair blow after shooting 9159-9176. Pick up tailpipe & packer & RIH on 2 3/8" tbg. Attempt to set packer several times without success. Start POH w/ tbg & packer. (402 349)

84-05-15 (47) Lathrop

Swabbing
0700 hrs (13 hrs S.I.) Well head press: 40 psi. Bleed off pressure w/ lazy 2 - 3' flare. POH w/ remaining tbg and packer. Re-dress pkr & RIH w/ 1.79 "XN" nipple, 1 jt 2 3/8 tbg, 1.87 "X" nipple, 2 3/8 x 4' pup, OTIS premalatch packer, 2 3/8 x 6' pup, On - Off tool w/ 1.87 "X" profile on 2 3/8 tbg. Set packer @ 9081' w/ "XN" nipple @ 9123', X nipple @ 9091', and On-Off tool @ 9073'KB. Fill annulus w/ 80 bbls KCL water & press test packer to 500 psi. Held OK. Rig to swab. IFL @ 4850' KB. Pulled 7 swabs over 4 hrs. to recover 16 bbls water. FFL @ 8500'KB. Trace of gas w/ swabs. S.I. @ 1700 hrs.
(407,854)

AMERICAN HUNTER SOUZA # 1

84-05-16 (48)	Lathrop	Swabbing 0700 hrs SITP: 300 psi. Bleed off gas head. Rig to swab. IFL @ 2060'KB. Pulled 14 swabs over 10 1/2 hrs to recover 46 bbls water. Trace of gas with swabs. No gas flow after swabs. FFL @ 8000' KB. S.I. @ 1700 hrs. Total new fluid recovered: 62 bbls. (414,154)
84-05-17 (49)	Lathrop	Swabbing 0700 hrs SITP: 145 psi. Bleed off and rig to swab. IFL @ 3000' KB. Pulled 16 swabs over 10 1/2 hrs from 9050' to recover 38.2 bbls water. Trace of gas with swabs. No after flow. FFL @ 7900'. S.I.@ 1800 hrs. Total new fluid recovered: 100.2 bbls. (414,354)
84-05-18 (50)	Lathrop	Pull packer. SITP 120 psi. SICP 100 psi. Pressure annulus to 500 psi for 15 mins. Bled annulus down to 175 psi. Bled off tubing. Rig to swab. Fluid level at 3300 ft. Pulled 16 swabs over 10 hrs to 9050 ft to recover 38.85 bbls of gassified water. No gas after swabs. Final fluid level at 8400 ft. New fluid recovered 138.85 bbls. Shut in at 1800 hrs. (417,454)
84-05-19 (51)	Lathrop	Set packer. (GAMACHE #11) 0700 SITP 150 psi. SICP 150 psi. Bled off tubing. Fill tubing with 16 bbls 3% KCl water. Unseat packer. Circulate hole. Pull and lay down 85 joints of tubing. POH. Lay down packer. Rig Schlumberger. Set Halliburton bridge plug at 9145 ft. Pressure test plug to 3500 psi for 20 mins. Held good. Perforate intervals 6552-6553' and 6410-6411' at 4 SPF with 4" HSC gun using 22 gm charges. RIH with packer to 6329'. (426,454)
84-05-20 (52)		Pull packer. (GAMACHE #11) 0700 SITP and SICP 640 psi. Bled off. Circulate with 3% KCl. Well flowing. Mix 200 bbls 7% KCl. Displace hole. RIH and set packer at 6425'. Squeeze 10 bbls down annulus at 1/2 BPM at 2200 psi with no returns. Squeeze 12 bbls down tubing at 3/4 BPM at 2200 psi with no returns. (431,554)
84-05-21 (53)		Cement squeeze. (GAMACHE #11) 0700 SITP 580 psi. SICP 380 psi. Bled off. Unseat packer. Pull 2 joints. Circulate hole. POH. Lay down packer. Rig Schlumberger. Set Halliburton EZ-SV cement retainer at 6545'. RIH with stinger on 2 3/8" tubing and set into retainer. (438,954)

AMERICAN HUNTER SOUZA # 1

84-05-22 (54) W.O.C. (GAMACHE #11)
0700 SITP 400 psi. SICP 100 psi. Bled off. Rig Halliburton. Establish feed rate down tubing at 1/2 bbl/min at 3600 psi with 3 bbls. Pull out of retainer. Mix 50 sxs oilwell class "G" cement plus additives. Slurry volume 10 bbls. Circulate to bottom. Stage squeeze 7 bbls to formation to standing pressure of 2250 psi. Pull out of retainer. Backwash excess cement. Pull to 6398'. Establish feed rate into perforations at 6410-6411' at 1/2 bbl/min at 2100 psi. Mix 50 sxs of same cement as above. Slurry volume 10 bbls. Circulate cement to bottom. Pull tubing to 5775'. Stage squeeze 8 bbls to 2200 psi. Shut in on squeeze at 1600 hrs. (445,754)

84-05-23 (55) Pull tubing.
WOC. SIP 1950 psi at 1800 hrs.
(448,454)

84-05-24 (56) Finish pulling tubing.
0700 hrs. SIP 1800 psi. Bleed off. POH. RIH with bit and drill collars on 2 3/8 tubing. Tag cement @ 6338 feet. Drill out cement and clean out to top of retainer at 6545 feet. Circulate clean. Pressure squeeze to 2000 psi for 20 minutes. Hold good. POH. SDFN with 10 joints of tubing and drill collars and bit left to lay down.
(451,454)

84-05-25 (57) Pick up tubing.
Finish POH. Lay down drill collars. Unload new 2 3/8" N80 EUE tubing. RIH with bit and scraper. Tag top of retainer. POH laying down tubing. Lay down bit and scraper. Pick up and run 130 joints new tubing.
(454 554)

84-05-26 (58) Moreno Fishing casing gun.
Continue running in hole with new tubing. Land tubing at 6543'. Displace to nitrogen. POH. Rig Schlumberger. RIH with 4" HSC csg gun with 25' at 2 SPF. Log gun into position to cover interval 6466-6491'. Shot interval 6491-6481' with good kick. Gun did not appear to fire over interval 6481-6466'. Tool stuck. Worked for 1 hour. Pulled line off at gun. POH. Bottom of line covered with cement, colored material. Ordered out fishing tools. RIH w/ grapple overshot with jars and bumper sub on tbg. Took weight at 6245'. Worked down and latch onto fish at 6462'. Unable to hold onto latch onto fish. Pull 20 jts. Pump 32 bbls down tubing. SDFN. (458,554)

AMERICAN HUNTER SOUZA # 1

84-05-27 (59) Moreno

Run packer.
0700 SIP 50 psi. Circulate out sand and mud from 6245' to top of fish at 6461'. Latch onto fish and pull loose with 8000 lbs. POH. Lay down fishing tools and perforating gun. Gun had completely fired. RIH with tubing to 6545'. Circulate clean with 7% KCl water. POH. RIH w/ 1.79 "XN" nipple + 1 joint tubing + 1.875 "X" nipple + 4' pup joint + Perma-latch packer + 6' pup + 1.875 on-off tool on 105 joints tubing. SDFN.
(497,045)

84-05-28 (60) Moreno

Swabbing.
0730 SIP zero. RIH with packer. Unable to set packer. POH. Lay down packer. RIH w/ 1.79 "XN" nipple + 1 joint tubing + 1.875 "X" nipple + 6' pup joint + Guiberson Uni-V packer on 2 3/8" tubing. Set packer at 6367' with XN nipple at 6408'. Land tubing in dognut. Pressure annulus to 1000 psi. Held good. SDFN. Temp. 95 °F.
(504,115)

84-05-29 (61) Moreno

Swab test
0830 SITP 50 psi. Rig to swab. Fluid level at surface. Pull 13 swabs over 4 1/2 hrs to 6300 feet to recover 28.8 bbls. Final fluid level at 5500 feet. Runs 9 to 13 had swab problems due to heavy drilling mud. Gas blow after swabs 9 to 13. New fluid 2.8 bbls. RIH with sinker bars to 6000 feet. POH Tools covered with heavy drilling mud and sand. SDFN at 1630 hrs

(506,915)

84-05-30 (62) Moreno

Run coiled tubing.
0730 SITP 480 psi. Bled off. Rig to swab. RIH and tag fluid. Level at 5500'. Unable to go deeper. Pump in 3 bbls KCl water. RIH with swab bar and work bar from 5000 to 6300'. Pull 3 swabs to 6000'. Final fluid level at 5900'. RIH with sinker bars to 6500'. POH. Tools covered with viscous drilling mud. Pulled 5 dry swabs. SI.
(510 915)

AMERICAN HUNTER SOUZA # 1

84-05-31 (63) Moreno

Swabbing
0700 hrs SITP: 380 psi. Bleed off & rig in OTIS coiled tbg unit RIH to 6540' KB while pumping N_2. Very little fluid returns. Nitrogen appears to be by-passing fluid. Pull coiled tbg to 5000' & fill hole w/ KCL water. Break circ w/ KCL water & clean out to 6540' KB until clean returns. Rec'd approx. 5 bbls thick mud with traces of sand. Pull coiled tbg to 6493' & spot 500 gal 15% MCA to perfs. Pull coiled tbg & squeeze acid to perfs @ 2.5 BPM @ 2450 psi. ISIP: 1750 psi bleeding to 1250 psi in 15 min. Open well to tank to recover 1.5 bbls KCL water in 30 mins. Leave open to tank w/ slight flow of water. (521,430)

84-06-01 (64) Moreno

Swabbing
0700 hrs rig to swab. IFL @ surface. Pulled 13 swabs over 9 1/2 hrs. from 6300' to recover 26.5 bbls KCL water and acid water. FFL @ 6000'. Waited 1 hr between swabs 9 and 13. Fair gas blow after swab #12. No blow after swab 13. S.I. @ 1700 hrs. LFLTR: 9.7 bbls.

(525,180)

84-06-02 (65) Moreno

Swabbing.
0700 hrs SITP: 240 psi. Bleed off and rig to swab. IFL @ 4800'. Pull 5 swabs over 2 hrs from 6300' to recover 4.25 bbls fluid. Good gas blow after 5th swab. Unable to get past 5200' on swab #6. RIH w/ sinker bar and unable to get past 5200'KB. Fill hole w/ KCl water. Unseat packer and reverse circ hole clean to bottom @ 6545'KB. Recover thick mud with sand and silt. Reset packer @ 6367' with tailpipe @ 6408'KB. Press test packer to 1000 psi for 15 mins. Held OK. Rig to swab. Pull 4 swabs to recover 13.75 bbls KCl water. LFLTR: 13 bbls. SI @ 1945 hrs.

(528 530)

84-06-03 (66) Moreno

Swabbing. (GAMACHE #11)
0700 hrs SITP: 340 psi. Blow down and rig to swab. IFL @ 2700'KB. Pull 9 swabs throughout day from 6000' to recover 16.5 bbls fluid. Good gas blow after swab #3. Unable to get past 4700' on swab #4. Pump 3 bbls KCl water down tbg & work sinker bar from 4000-6000'. Re-run swab. Recovering very thick muddy fluid. FFL @ 4900'. S.I. @ 1700 hrs. New fluid recover: 3.5 bbls.

(531,830)

AMERICAN HUNTER SOUZA # 1

84-06-04 (67) Moreno

Swabbing (GAMACHE #11)
0730 hrs SITP: 650 psi. Blow down & rig to swab. IFL @ 3900'. Unable to get down w/ swab and sinker bar. Pump 3 bbls KCl water down tbg & work sinker bar from 3900-6300'. Re-run swab. Recovered 7 bbls fluid in 4 runs. Fluid gassy w/ after blow. Unable to get down on swab #7. Pump 6 bbls KCl water down tbg. Unseat packer & circ hole w/ 2% KCl water to 6520'KB to recover heavy mud. Re-set packer @ 6376'KB. Press test packer to 1000 psi for 15 mins. Held O.K. Rig to swab. Pulled 5 swabs to recover 15.5 bbls KCl water. FFL @ 3600'. S.I. @ 1830 hrs. New fluid recovered prior to filling hole 7.5 bbls.

(534,830)

84-06-05 (68) Moreno

Swabbing.
0700 hrs SITP: 400 psi. Bleed off & rig to swab. IFL @ 2700' Pull 5 swabs over 2 hrs to 5500' to recover 10 bbls KCL water & mud. Unable to get past 5500'. Pump 10 bbls KCL water down tbg. Unseat packer and rig to swab. Pull 21 swabs over 8 hrs to recover 90 bbls. KCL water, mud and sand. Mud is dark grey with sand in suspension. Wt. 11.9 #/gal. FFL @ 5200'. S.I. @ 1900 hrs. LFLTR: 29 bbls.

(537,645)

84-06-06 (69) Moreno

Rig N_2 unit
0700 hrs SITP: 95 psi, SICP: 115 psi. Bleed off tbg & rig to swab. IFL @ 4600'. Pull 6 swabs over 2 hrs to 6300' to recover 15 bbls muddy water w/ trace of sand. FFL @ 5600' very little gas. Pump 10 bbls KCL water down csg annulus. New FL @ 5000'. Pull 14 swabs over 7 hrs from 6300' to recover 15 bbls muddy water. RIH w/ sinker bar to 6540'. No fill. FFL @ 5800'. Very little gas S.I. @ 1700 hrs. LFLTR: 9 bbls

(540,305)

AMERICAN HUNTER SOUZA # 1

84-06-07 (70) Moreno

Displace hole with N_2
0700 SICP: 245 psi, tbg press 0 psi (tbg left open for nite). RIH w/ swab to tag fluid @ 5700'KB. Lower tbg to 6498'. Rig N_2 & reverse circ hole to recover 7 bbls heavy mud and sand. Continue pumping N_2 w/ no fluid recovery. Pull up & set packer so tailpipe at 6408'. Inject 20000 SCF N_2 to formation to 4500 psi. ISIP 4400 psi bleeding to 3100 psi in 15 mins. Open on 1/4" choke and recovered large amounts of sand. Tubing plugged off. Fill annulus w/ KCl water. Release packer and reverse circ hole with water. Recover 5 bbls heavy mud & sand. Re-set packer. Pull 2 swabs and flared gas for 30 mins with fair gas blow and tbg plugged off. Release packer & reverse w/ N_2 to recover 3 bbls heavy mud and sand. Ran out of N_2. Set packer. Swab water from tbg Good gas blow for 15 mins then tbg plugged off again. Left tbg open to tank for nite. New fluid recovered to date 6 bbls. (543 670)

84-06-08 (71) Moreno

Circulate hole w/ N_2
Tubing unloaded 5 bbls mud & sand @ 0400 hrs. Faint blow of gas. RIH w/ sinker bar & unable to pass 100'KB. Unseat packer & reverse hole w/ N_2 to recover 5 bbls mud & sand. Lower tbg to 6490'KB & reverse out 2 bbls mud w/ N_2. Set packer @ 6458' & pump 50 MCF N_2 to perfs @ 4500 psi. Open to flow on 1/8" choke @ 1120 hrs. Pressure dropping steadily w/ trace of gas mixed w/ N_2. At 1800 hrs TFP 180 psi. Open on 1" choke. Well periodically died & flowed muddy water till 2300 hrs. S.I. @ 2300 hrs. Approx. new fluid rec'd today: 17 bbls. (555 941)

AMERICAN HUNTER COMPLETION REPORTS

AHEL SOUZA #1 - FRESNO COUNTY, CALIFORNIA (GAMACHE #11)

84-06-09 (72) Moreno

SI for B.U.
0700 hrs SITP: 614 psi (8 hrs S.I.) Blow down on 1" choke for 2 hrs to recover approx. 3 bbls watery mud & sand with trace of condensate. S.I. for 1 hr. Tbg built to 155 psi. Blow down on 1" choke unseat packer and reverse hole w/ N_2 to recover 2 bbls watery mud. Reset packer leaving 960 psi N_2 pressure on annulus. Leave tbg open on 1" choke. TFP less than 10 psi, est. rate 50-75 MCFD. S.I. @ 1330 hrs & record surface B.U. pressure as follows:

30 mins	- 120 psi	9 hr	- 585 psi
1 hr	- 190 psi	10 hr	- 630 psi
2 hr	- 275 psi	11 hr	- 675 psi
3 hr	- 310 psi	12 hr	- 690 psi
4 hr	- 390 psi	13 hr	- 730 psi
5 hr	- 445 psi	14 hr	- 750 psi
6 hr	- 490 psi	15 hr	- 790 psi
7 hr	- 530 psi	16 hr	- 800 psi
8 hr	- 550 psi	17 hr	- 820 psi
		18 hr	- 840 psi

(559 286)

84-06-10 (73). Moreno

Running tbg. (GAMACHE #11)
Well S.I. total of 19.5 hrs. SITP: 890 psi. Blow down on 1" choke. No fluid recovered. Unseat packer & blow hole around w/ annular N_2 pressure. No fluid recovered. Reverse circ hole w/ 2% KCl water. POH w/ tbg. Rig Schlumberger & set EZ Drill BP @ 6400.7'KB. PT to 2500 psi. Held OK. (562 251)

84-06-11 (74) Moreno

RIH w/ overshot. (GAMACHE #11)
RIH w/ tbg to 6400'. Rig Howco & blow hole dry w/ N_2, POH w/ tbg. Rig Schlumberger & position gun to shoot 6315-6330'KB. Pressure csg to 1000 psi w/ N_2. Gun misfired. Reposition gun and shoot interval 6310-6315' @ 4 SPF. Unable to pull gun free. Bleed off pressure and gun pulled free. Gun covered w/ mud. Had small trace of gas at surface. Re-run gun and shoot interval 6315-6330' @ 4 SPF. Gun blew uphole and sheared off line leaving gun in hole. Gas blow increased after shooting 6315-6330'. Flow well up casing on 1/8" prover plate. Well died off in 1 hour. S.I.

(574 086)

AMERICAN HUNTER COMPLETION REPORTS

.HEL SOUZA #1 - FRESNO COUNTY, CALIFORNIA (GAMACHE #11)

84-06-12 (75)	Moreno	Running Overshot 0700 hrs SITP: 15 psi. Bleed off to 0 psi. Pick up overshot & RIH on 2 3/8 tbg. Tag obstruction @ 6250' KB POH. No fish. Re-run overshot & circ. w/ KCL water to 6314' KB. Recovered mud & sand. POH. No Fish. Recovered strands of wire. RIH w/ barbed spear. POH, no fish (578,813)
84-06-13 (76)	Moreno	Running tbg. 0800 hrs no press on WH. RIH with concave mill & mill over fish to cut line. Circ bottoms up. Recover pieces of electric line and gassy fluid. POH w/ tubing. Pick up overshot & RIH w/ 60 jts tbg. S.I. well to change out drilling line. (581 539)
84-06-14 (77)	Moreno	Clean up well. RIH w/ overshot. Attempt to latch fish without success. POH & recover pieces of wire. RIH w/ overshot & jar down onto fish. POH w/ fish. RIH w/ Otis "XN" nipple, 1 jt tbg, Otis X nipple & reverse circulation hole w/ 2% KCl water to PBTD @ 6400' to recover mud & sand. Reland tbg @ 6285'. Rig in N_2 & displace hole with nitrogen. Open well to tank @ 2100 hrs. (589 222)
4-06-15 (78)	Moreno	Clean up well. 0700 Gas TSTM. SICP 15 psi. Blow down with nitrogen. Recovered trace of mud. Displace 60,000 ft^3 nitrogen into formation at 3700 SCF/min at 3800 psi. ISIP 3750 psi bleeding to 3510 psi in 15 mins. Bled down tubing. No flow from tubing when annulus pressure down to 250 psi. No formation gas. Bled off annulus. Unable to lower tubing. Pull 4 joints tubing with 40,000 lbs over string weight. Fill hole with KCl water. Clean out to 6350'. Unable to go deeper. PBTD at 6400'. Steady gas to surface while reversing out sand, mud and drill cuttings. Land tubing at 6100'. Displace with nitrogen. Inject 10,000 ft^3 to formation at 3600 psi. Open on 1 inch choke. No fluid recovered. Tubing plugged off with 400 psi on annuius. Pressure annulus to 2500 psi. No flow. Left tbg open for night. (592 402)

AMERICAN HUNTER COMPLETION REPORTS

AHEL SOUZA #1 - FRESNO COUNTY, CALIFORNIA (GAMACHE #11)

84-06-16	Moreno	Circulating well. (GAMACHE #11) 0700 Tubing dead. SICP 2500 psi. Bled off with gas TSTM. Pull 12 joints at 20,000 lbs over string weights before pulling out of debris. Establish circulation with KCl water. Circulate down to 6440'. Unable to go deeper. Circulate out sand, mud and chunks of cement and formation rock. Circulate with foamed KCl water. Recovered large volumes of mud, sand, chunks of rock and cement from pea size to 1/2" x 1" in size. Circulate with foam to 0100 hrs. Circulate with nitrogen to 0400 hrs. Tubing plugged off. Shut down. SICP 800 psi. (619 364)
84-06-17 (80)	Moreno	Well shut in. Crew released. (GAMACHE #11) 0800 SITP and SICP 800 psi. Cleaned out debris from choke and surface lines. Open tubing on two inch. Tubing plugged with 400 psi on annulus. Circulate with KCl water. Pull 60' with 10,000 lbs over string weight. Circulate down 6335'. Unable to go deeper. Tubing sticking. Pull 16 joints tubing. Secure well. Release rig crew. (621 979)
84-06-18 (81)	Moreno	Well shut in. (GAMACHE #11) Well shut in. Rig crew released.
84-06-19 (82)	Moreno	Pull tubing. (GAMACHE # 11) Well S.I.
84-06-20 (83)		Remove BOP's. (GAMACHE 11) 0800 hrs SITP 290 PSI. SICP 40 PSI. Bleed off pressure and lower tubing to tag fill @ 6355' KB. Reland tubing @ 6330'. Rig Howco and spot 6 bbls cement plug across perfs. Pull tubing to 6100' and backwash excess cement. Pull tubing to 5900' and pressure well to 800 PSI and WOC for 4 hrs. Lower tubing and tag top of cement plug @ 6155' KB. Displace hole w/ 75 bbls 10.8#/gal mud to 1500' KB. Pull tubing. Rig Schlumberger and perforate 1399 - 1400' w/4" casing gun. Rig Howco and break circ up surface casing. Pump 15 bbls cement to set plug from 1400' to 1200' in 9 5/8 and 5 1/2 casings. Displace with 23 bbls water and 2 bbls cement to set plug from 5' to 30' in 5 1/2 casing. SIFN. NOTE: Above operation witnessed by California Oil & Gas Commission. (634,039)

AMERICAN HUNTER COMPLETION REPORTS

AHEL SOUZA #1 - FRESNO COUNTY, CALIFORNIA

84-06-21 (84)

Well plugged and abandoned. (GAMACHE # 11)
Remove BOP's and tubing spool. Cut off 9 5/8 and 5 1/2 casings 6' below ground. Weld plate on casings. Dug out conductor pipe and fill cellar. Rig out rig. Transfer 231 jts tubing, packers and nipples to R&R Transport and transfer wellhead and casing bowl to Gray tool. Clean up location. Well abandoned.
FINAL REPORT. (641,000)

DRILLING HISTORY

AMERICAN HUNTER/SOUZA #1 SW 1/4, SE 1/4, SEC 36, T14S, R12E MDB & M FRESNO CO CALIFORNIA

83-12-06 (32)	9778 Ft. Lathrop	POH w/DST # 8 Progress: Nil DST # 7: 9694' - 9777' (L/Lathrop) Times: 10/60 VO: 45 mins - lost packer seat - Misrun Used and rec. 3000' water cushion 1500' gas cut drlg. mud. PF 1380 PSI IHP 5461 PSI ISIP 5590 PSI IF 1398 PSI 5238 1586 Leaking at end. BHT - 227 ° F.	(MONT. 19) (497,424)
83-12-07 (33)	9819 Ft Lathrop	Cut Core # 3 Progress: 41 Ft. CORE #3: Results to follow. DST # 8: 9652' - 9778' (L/Lathrop Used 3000' water cushion, lost packer seat immed. on preflow MISRUN. Rec: 3000' water cushion 793' gassy cut mud. IHP 5498 PSI 5350 Trip gas after 8 mins was 9300 units.	(MONT. 19) (512,923)
83-12-08 (34)	10,000 Ft Lathrop	Drilling. Progress: 181 Ft. CORE # 3: 9778' - 9838' (L/Lathrop) Cut 60 Ft Rec. 60 ft	(MONT. 19) (535,256)
83-12-09 (35)	10,217' TD Lathrop	Rig to log. Progress: 217 Ft. 10,217' - 4 3/4°	(MONT. 19 (546,571)
83-12-10 (36)	10,217 Ft Lathrop	Logging. Progress: Nil	(MONT. 19) (554,104)
83-12-11 (37)	10,217 Ft Lathrop	Side cores. Progress: Nil	(MONT. 19) (564,676)
83-12-12 (38)	10,217 Ft Lathrop	Lay down drill string. Progress: Nil	(MONT. 19) (619,742)

WELL SUMMARY REPORT

Attachment #3

Souza #1 - Fresno County, California

ELECTRICAL LOGS

DATE	RUN NO.	HOLE DEPTH	LOGS RUN
Drilling Depth - 7332 ft.			
Nov. 19/83	1	145 - 7257'	BHCS
Nov. 19/83	1	1709 - 7298'	DI-SFL
Nov. 19/83	1	145 - 7301'	LD-CN
Drilling Depth - 10,217 ft.			
Dec. 8/83	2	5900 - 10171'	BHCS
Dec. 8/83	2	1709 - 10137	NGR
Dec. 8/83	2	5900 - 10206	DI-SFL, DI-Linear Correlation Log
Dec. 8/83	2	5900 - 10203	LD-CN, Down Mud Log
Dec. 8/83	2	1709 - 10208	Dipmeter
Dec. 8/83	2	2400 - 10170	Microlog
Dec. 8/83	2	1709 - 10165	Electromagnetic Propogation Log
Drilling Depth - 10,177 ft.			
Apr. 3/84	1	2400 - 10149	CBL w./Neutron Waveforms
Apr. 3/84	1	2400 - 10149	CBL w./Neutron Variable Density
Apr. 4/84	2	2400 - 10149	CBL(B.I. + Waveforms)
Apr. 4/84	2	2400 - 10149	CBL(Amplitude + VDL)
Apr. 4/84	3	2400 - 10154	Acoustic Caliper Log w./Gamma Ray
Apr. 4/84	3	2400 - 10154	Cement Evaluation Log w./Gamma Ray
Apr. 4/84	4	2400 - 10153	Thermal Neutron Decay Time Log
Apr. 5/84	1	2400 - 10137	CNL
Apr. 10/84	1	8000 - 9800 (Depth-Driller 9800')	Free Point Indication Log
Apr. 14/84	4	2400 - 10153	TDT Quicklook
Apr. 16/84	3	9195 - 10150	CB-VD Waveforms
Apr. 17/84	3	9196 - 10150	Cement Evaluation Log/Acoustic Calipers

Terra Tek Core Services®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

019-21924

AMERICAN HUNTER EXPLORATION, LTD

Well: SOUZA #1
Field: Wildcat
Drilling Fluid: Gel-Chem

State: California
County: Fresno
Location: Sec 36-T14S-R12E

Date: 01 Jan 1984
TTCS File #: 423
Elevation: 451.8 KB

DEAN-STARK PLUG ANALYSIS

Sample Number	Depth (feet)	Permeability Horz (md)	Permeability Vert (md)	OB Perm 4500 PSI (md)	Porosity (%)	Saturation Oil (%)	Saturation H2O (%)	Grain Density (gm/cc)	Lithology
LATHROP FORMATION									
1	9159.0-60.0	3.7	2.6	0.36	14.5	8.8	61.8	2.65	Sd,vf-mg,slty,mic
2	9160.0-61.0	3.7	2.8	1.6	14.0	6.3	68.3	2.65	Sd,vf-mg,slty,mic
3	9161.0-62.0	2.0	1.7	0.78	13.5	4.4	71.6	2.65	Sd,vf-mg,slty,mic
4	9162.0-63.0	0.88	0.81	0.39	13.6	0.0	77.7	2.65	Sd,vf-fg,slty,mic
5	9163.0-64.0	2.0	1.3		14.1	0.0	72.8	2.65	Sd,vf-mg,slty,mic
6	9164.0-65.0	1.2	0.41		14.6	0.0	82.0	2.66	Sd,vf-fg,slty,mic
7	9165.0-66.0	1.5	0.82		14.0	0.0	74.0	2.65	Sd,vf-fg,slty,mic
8	9166.0-67.0	2.1	1.0		14.7	0.0	78.1	2.65	Sd,vf-fg,slty,mic
9	9167.0-68.0	3.8	1.9	1.8	15.0	0.0	74.4	2.65	Sd,vf-mg,slty,mic
10	9168.0-69.0	4.0	2.9		15.5	0.0	77.0	2.65	Sd,vf-mg,slty,mic
11	9169.0-70.0	2.9	2.0		14.9	0.0	76.4	2.65	Sd,vf-mg,slty,mic
12	9170.0-71.0	0.69	0.07		13.5	0.0	81.7	2.69	Sd,vf-fg,slty,mic,sl/shy
13	9171.0-72.0	2.6	1.8	1.3	15.0	0.0	79.3	2.65	Sd,vf-mg,slty,mic
14	9172.0-73.0	1.2	0.80		13.7	0.0	79.1	2.66	Sd,vf-mg,slty,mic
15	9173.0-74.0	1.5	1.2	0.53	13.5	0.0	77.6	2.65	Sd,vf-mg,slty,mic
16	9174.0-75.0	1.2	0.84		13.0	0.0	79.1	2.65	Sd,vf-mg,slty,mic
17	9175.0-76.0	0.01	<0.01		1.8	0.0	83.2	2.72	Sd,vfg,lmy,slty,mic

RECEIVED
APR 23 1984
DIVISION OF OIL & GAS
COALINGA

Terra Tek Core Services®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

AMERICAN HUNTER EXPLORATION,LTD
Well: SOUZA #1

Date: 01 Jan 1984

TTCS File #: 423

DEAN-STARK PLUG ANALYSIS

Sample Number	Depth (feet)	Permeability Horz (md)	Permeability Vert (md)	OB Perm 4500 PSI (md)	Porosity (%)	Saturation Oil (%)	Saturation H2O (%)	Grain Density (gm/cc)	Lithology
18	9176.0-77.0	<0.01	0.01		1.4	0.0	86.8	2.71	Sd,vfg,lmy,slty,mic
19	9177.0-78.0	1.5	0.26		13.2	0.0	79.9	2.65	Sd,vf-mg,slty,mic
20	9178.0-79.0	0.56	0.35	0.15	12.3	0.0	78.9	2.65	Sd,vf-fg,slty,mic,sl/lmy
21	9179.0-80.0	0.64	0.40		13.5	0.0	82.8	2.65	Sd,vf-fg,slty,mic
22	9180.0-81.0	1.2	2.2		14.3	0.0	79.0	2.65	Sd,vf-fg,slty,mic,sl/lmy
23	9181.0-82.0	2.0	1.5		14.4	0.0	76.1	2.64	Sd,vf-mg,slty,mic
24	9182.0-83.0	2.1	1.5		14.0	0.0	75.4	2.64	Sd,vf-mg,slty,mic
25	9183.0-84.0	1.8	1.4		13.8	0.0	79.9	2.65	Sd,vf-mg,slty,mic
26	9184.0-85.0	0.87	0.78		12.6	0.0	77.9	2.65	Sd,vf-mg,slty,mic
27	9185.0-86.0	0.03	0.06		2.1	0.0	92.9	2.69	Sd,vf-fg,slty,mic,lmy
28	9186.0-87.0	0.31	0.34		8.6	0.0	93.0	2.66	Sd,vf-fg,slty,mic,sl/lmy
29	9187.0-88.0	0.12	0.09	0.02	13.4	0.0	82.2	2.65	Sd,vf-fg,slty,mic
30	9188.0-89.0	0.61	0.31		11.2	0.0	81.7	2.66	Sd,vf-fg,slty,mic
31	9189.0-90.0	0.10	0.18		7.2	0.0	92.3	2.67	Sd,vf-fg,slty,mic
32	9190.0-91.0	0.07	0.07		6.8	0.0	93.7	2.67	Sd,vf-fg,slty,mic
33	9191.0-92.0	0.84	0.72		11.4	0.0	74.0	2.65	Sd,vf-fg,slty,mic
34	9192.0-93.0	0.93	0.69		11.8	0.0	73.0	2.65	Sd,vf-fg,slty,mic
35	9193.0-94.0	0.25	0.13	0.05	11.2	0.0	83.4	2.68	Sd,vf-fg,slty,mic
36	9194.0-95.0	0.99	0.45		11.1	0.0	78.2	2.65	Sd,vf-mg,slty,mic
37	9195.0-96.0	1.4	1.1		12.4	0.0	77.5	2.65	Sd,vf-mg,slty,mic
38	9196.0-97.0	0.83	1.0		12.7	0.0	76.1	2.65	Sd,vf-fg,slty,mic
39	9197.0-98.0	1.4	1.5		13.5	0.0	76.1	2.65	Sd,vf-mg,slty,mic

Terra Tek Core Services®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

AMERICAN HUNTER EXPLORATION,LTD
Well: SOUZA #1

Date: 01 Jan 1984

TTCS File #: 423

DEAN-STARK PLUG ANALYSIS

Sample Number	Depth (feet)	Permeability Horz (md)	Permeability Vert (md)	OB Perm 4900 PSI (md)	Porosity (%)	Saturation Oil (%)	Saturation H2O (%)	Grain Density (gm/cc)	Lithology
	9198.0 - 9200.0								Shale
	9200.0 - 9726.0								Drilled Interval
40	9726.0-27.0	0.43	0.33		12.4	0.0	72.4	2.65	Sd,f-ms,slty,mic
41	9727.0-28.0	1.0	1.1		12.1	0.0	82.7	2.64	Sd,f-ms,slty,mic
42	9728.0-29.0	1.3	1.4		11.7	0.0	79.7	2.63	Sd,f-ms,slty,mic
43	9729.0-30.0	1.7	1.7	0.12	12.1	0.0	85.3	2.63	Sd,f-ms,slty,mic
44	9730.0-31.0	0.49	0.41		12.0	0.0	79.9	2.64	Sd,f-ms,slty,mic
45	9731.0-32.0	1.0	0.79		12.1	0.0	80.6	2.63	Sd,f-ms,slty,mic
46	9732.0-33.0	1.2	0.97		11.8	0.0	82.8	2.64	Sd,f-ms,slty,mic
47	9733.0-34.0	0.05	0.05	< 0.01	12.2	0.0	75.0	2.67	Sd,fs,slty,mic
48	9734.0-35.0	0.03	0.01		11.1	0.0	87.6	2.69	Sd,fs,slty,mic,sl/shy
49	9735.0-36.0	0.08	0.06		11.7	0.0	86.5	2.66	Sd,f-ms,slty,mic
50	9736.0-37.0	0.21	0.03	0.01	12.9	0.0	84.8	2.66	Sd,f-ms,slty,mic
51	9737.0-38.0	0.12	0.12		12.3	0.0	85.0	2.66	Sd,f-ms,slty,mic
52	9738.0-39.0	5.5	5.1		13.0	0.0	84.1	2.62	Sd,f-cs,slty,mic
53	9739.0-40.0	4.8	4.4		13.1	0.0	84.0	2.62	Sd,f-cs,slty,mic
54	9740.0-41.0	4.7	6.3		13.1	0.0	85.1	2.62	Sd,f-cs,slty,mic
55	9741.0-42.0	7.4	6.1	0.59	12.6	0.0	86.1	2.60	Sd,f-cs,slty,mic
56	9742.0-43.0	9.0	6.0		13.2	0.0	81.2	2.62	Sd,f-cs,slty,mic
57	9743.0-44.0	5.8	6.2		12.4	0.0	82.8	2.62	Sd,f-cs,slty,mic
58	9744.0-45.0	5.3	4.5		12.5	0.0	82.8	2.62	Sd,f-cs,slty,mic
59	9745.0-46.0	3.4	3.3	0.17	12.1	0.0	85.4	2.62	Sd,f-cs,slty,mic

Terra Tek Core Services®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

AMERICAN HUNTER EXPLORATION,LTD
Well: SOUZA #1

Date: 01 Jan 1984

TTCS File #: 423

DEAN-STARK PLUG ANALYSIS

Sample Number	Depth (feet)	Permeability Horz (md)	Permeability Vert (md)	OB Perm 4900 PSI (md)	Porosity (%)	Saturation Oil (%)	Saturation H2O (%)	Grain Density (gm/cc)	Lithology
60	9746.0-47.0	1.5	1.2		12.3	0.0	83.2	2.63	Sd,f-ms,slty,mic
61	9747.0-48.0	1.6	1.0		11.4	0.0	87.2	2.62	Sd,f-ms,slty,mic
62	9748.0-49.0	1.8	0.55		12.3	0.0	91.9	2.62	Sd,f-ms,slty,mic
63	9749.0-50.0	3.6	3.8		12.1	0.0	87.6	2.62	Sd,f-ms,slty,mic
64	9750.0-51.0	3.0	2.3		11.8	0.0	86.3	2.62	Sd,f-ms,slty,mic
65	9751.0-52.0	2.5	2.1		11.5	0.0	89.2	2.62	Sd,f-ms,slty,mic
66	9752.0-53.0	0.49	0.44	0.03	11.6	0.0	86.3	2.65	Sd,f-ms,slty,mic
67	9753.0-54.0	0.44	0.37		11.5	0.0	88.0	2.65	Sd,f-ms,slty,mic
68	9754.0-55.0	0.08	0.07		10.9	0.0	89.4	2.67	Sd,f-ms,slty,mic
69	9755.0-56.0	0.12	0.06		12.2	0.0	86.3	2.66	Sd,vf-fs,slty,mic,sl/shy
70	9756.0-57.0	0.12	0.22		12.6	0.0	90.2	2.66	Sd,fs,slty,mic
71	9757.0-58.0	0.77	0.72		12.7	0.0	83.3	2.64	Sd,f-ms,slty,mic
72	9758.0-59.0	1.1	0.93	0.06	12.5	0.0	81.2	2.64	Sd,f-ms,slty,mic
73	9759.0-60.0	0.68	0.67		12.2	0.0	83.5	2.64	Sd,f-ms,slty,mic
74	9760.0-61.0	1.6	1.5		12.9	0.0	86.8	2.63	Sd,f-ms,slty,mic
75	9761.0-62.0	0.55	0.27		12.7	0.0	85.8	2.65	Sd,f-ms,slty,mic
76	9762.0-63.0	<0.01	<0.01		5.2	0.0	90.5	2.66	Sd,vf-fs,slty,mic,shy
77	9763.0-64.0	0.50	0.36		10.5	0.0	94.2	2.63	Sd,f-ms,slty,mic,sl/lig
	9764.0 - 9767.0								Shale
78	9767.0-68.0	0.07	0.09	0.01	14.0	0.0	88.2	2.66	Sd,fs,slty,mic
79	9768.0-69.0	0.12	0.06		12.5	0.0	85.7	2.65	Sd,fs,slty,mic
80	9769.0-70.0	0.08	0.10		11.0	0.0	93.4	2.67	Sd,fs,slty,mic,sl/shy

Terra Tek Core Services®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

AMERICAN HUNTER EXPLORATION,LTD
Well: SOUZA #1

Date: 01 Jan 1984

TTCS File #: 423

DEAN-STARK PLUG ANALYSIS

Sample Number	Depth (feet)	Permeability Horz (md)	Permeability Vert (md)	OB Perm 4900 PSI (md)	Porosity (%)	Saturation Oil (%)	Saturation H2O (%)	Grain Density (gm/cc)	Lithology
81	9770.0-71.0	6.8	2.9		13.9	0.0	95.5	2.62	Sd,f-cg,slty,mic
	9771.0 - 9778.0								Not Recovered
82	9778.0-79.0	0.73	0.62	0.07	12.7	0.0	78.1	2.64	Sd,f-mg,slty,mic
83	9779.0-80.0	0.58	0.05		12.7	0.0	79.2	2.64	Sd,f-mg,slty,mic
84	9780.0-81.0	26+	3.0		13.0	0.0	88.9	2.62	Sd,f-mg,slty,mic
85	9781.0-82.0	6.7	6.8		13.7	0.0	80.8	2.63	Sd,f-mg,slty,mic
86	9782.0-83.0	5.2	5.9	0.55	13.0	0.0	80.4	2.63	Sd,f-mg,slty,mic
87	9783.0-84.0	0.21	0.34		12.7	0.0	73.1	2.65	Sd,fg,slty,mic ,sh lam
88	9784.0-85.0	0.48	0.35		13.5	0.0	71.9	2.65	Sd,fg,slty,mic
89	9785.0-86.0	0.08	0.05		12.9	0.0	80.7	2.67	Sd,fg,slty,mic
90	9786.0-87.0	0.14	0.07		12.5	0.0	73.2	2.65	Sd,fg,slty,mic
91	9787.0-88.0	0.76	0.50		12.7	0.0	70.2	2.64	Sd,f-mg,slty,mic
92	9788.0-89.0	1.6	1.6	0.13	12.7	0.0	70.3	2.64	Sd,f-mg,slty,mic
93	9789.0-90.0	0.65	0.48		12.5	0.0	70.2	2.65	Sd,f-mg,slty,mic
94	9790.0-91.0	0.04	0.04		10.9	0.0	89.1	2.67	Sd,vf-fg,slty,mic
95	9791.0-92.0	0.49	0.60		12.2	0.0	76.8	2.64	Sd,f-mg,slty,mic
96	9792.0-93.0	0.83	0.45		12.1	0.0	75.7	2.64	Sd,f-mg,slty,mic
97	9793.0-94.0	0.30	0.23	0.03	11.4	0.0	76.4	2.65	Sd,fg,slty,mic
98	9794.0-95.0	0.13	0.13		9.8	0.0	82.4	2.66	Sd,fg,slty,mic
99	9795.0-96.0	0.24	0.27		6.3	0.0	89.7	2.66	Sd,vf-fg,slty,mic,lmy
100	9796.0-97.0	0.02	0.02		1.8	0.0	72.3	2.70	Sd,vf-fg,slty,mic,v/lmy,sh lam
101	9797.0-98.0	0.02	0.02		2.3	0.0	84.2	2.69	Sd,vf-fg,slty,mic,v/lmy

+ Horizontal dehydration crack

Terra Tek Core Services®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

AMERICAN HUNTER EXPLORATION,LTD
Well: SOUZA #1

Date: 01 Jan 1984

TTCS File #: 423

DEAN-STARK PLUG ANALYSIS

Sample Number	Depth (feet)	Permeability Horz (md)	Permeability Vert (md)	OB Perm 4900 PSI (md)	Porosity (%)	Saturation Oil (%)	Saturation H2O (%)	Grain Density (gm/cc)	Lithology
102	9798.0-99.0	1.0	0.62	0.12	13.5	0.0	72.5	2.64	Sd,fg,slty,mic
	9799.0 - 9800.0								Sh,sd stks
103	9800.0-01.0	2.9	3.9		13.1	0.0	73.7	2.63	Sd,f-mg,slty,mic
104	9801.0-02.0	2.5	1.9		12.9	0.0	74.7	2.64	Sd,f-mg,slty,mic
105	9802.0-03.0	2.4	2.3		13.4	0.0	80.7	2.63	Sd,f-mg,slty,mic
106	9803.0-04.0	1.8	2.3		13.4	0.0	75.5	2.64	Sd,f-mg,slty,mic
107	9804.0-05.0	2.2	1.6		13.0	0.0	76.9	2.63	Sd,f-mg,slty,mic
108	9805.0-06.0	0.43	0.37		13.0	0.0	74.0	2.64	Sd,f-mg,slty,mic
109	9806.0-07.0	2.8	0.04	0.15	11.8	0.0	80.0	2.62	Sd,f-mg,slty,mic
110	9807.0-08.0	1.9	2.3		12.3	0.0	84.6	2.64	Sd,f-mg,slty,mic
111	9808.0-09.0	3.7	3.8		13.4	0.0	86.1	2.63	Sd,f-mg-slty,mic
112	9809.0-10.0	3.6	2.7	0.23	13.2	0.0	84.5	2.63	Sd,f-mg,slty,mic
113	9810.0-11.0	4.3	4.1		13.1	0.0	85.9	2.62	Sd,f-mg,slty,mic
114	9811.0-12.0	0.53	0.46		12.9	0.0	70.6	2.64	Sd,fg,slty,mic
115	9812.0-13.0	0.38	0.27		12.4	0.0	81.5	2.64	Sd,fg,slty,mic
116	9813.0-14.0	2.1	2.0		12.1	0.0	89.2	2.62	Sd,f-mg,slty,mic,sl/lmy
117	9814.0-15.0	0.13	0.13	0.015	13.2	0.0	81.4	2.64	Sd,fg,slty,mic,sh stk
118	9815.0-16.0	0.27	0.24		13.2	0.0	81.7	2.64	Sd,fg,slty,mic
119	9816.0-17.0	0.06	0.08		12.5	0.0	91.4	2.67	Sd,vf-fg,slty,mic,sh stks
120	9817.0-18.0	0.02	0.02		11.2	0.0	92.8	2.67	Sd,vfg,slty,mic,sh lam & stks
121	9818.0-19.0	1.5	1.2		13.0	0.0	79.7	2.62	Sd,f-mg,slty,mic,sh stks
122	9819.0-20.0	5.0	4.9		11.9	0.0	81.3	2.61	Sd,f-mg,slty,mic

Terra Tek Core Services®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

AMERICAN HUNTER EXPLORATION,LTD
Well: SOUZA #1

Date: 01 Jan 1984

TTCS File #: 423

DEAN-STARK PLUG ANALYSIS

Sample Number	Depth (feet)	Permeability Horz (md)	Permeability Vert (md)	OB Perm 4900 PSI (md)	Porosity (%)	Saturation Oil (%)	Saturation H2O (%)	Grain Density (gm/cc)	Lithology
123	9820.0-21.0	4.3	4.3	0.58	13.4	0.0	81.2	2.62	Sd,f-mg,slty,mic
	9821.0 - 9823.0								Sh,sl/sdy
124	9823.0-24.0	9.8	9.7		13.2	0.0	89.5	2.61	Sd,f-cg,slty,mic
125	9824.0-25.0	27	28		13.8	0.0	85.3	2.61	Sd,f-cg,slty,mic
126	9825.0-26.0	26	6.4	1.5	12.8	0.0	88.4	2.60	Sd,f-cg,slty,mic
127	9826.0-27.0	3.1	3.0		12.7	0.0	79.8	2.63	Sd,f-mg,slty,mic
128	9827.0-28.0	0.49	0.62		11.6	0.0	82.7	2.65	Sd,f-mg,slty,mic,sh stks
129	9828.0-29.0	0.10	0.09		12.1	0.0	91.0	2.65	Sd,fg,slty,mic
130	9829.0-30.0	0.06	0.08		11.2	0.0	91.9	2.66	Sd,fg,slty,mic
131	9830.0-31.0	10	10	0.51	12.2	0.0	90.8	2.61	Sd,f-cg,slty,mic,sl/lmy
132	9831.0-32.0	2.0	2.6		11.8	0.0	92.4	2.62	Sd,f-mg,slty,mic
133	9832.0-33.0	0.74	0.90		12.0	0.0	88.0	2.64	Sd,f-mg,slty,mic
134	9833.0-34.0	0.10	0.08		11.7	0.0	93.0	2.66	Sd,fg,slty,mic
135	9834.0-35.0	0.13	0.12		12.0	0.0	87.7	2.65	Sd,fg,slty,mic
136	9835.0-36.0	0.03	0.06		11.5	0.0	92.9	2.67	Sd,vf-fg,slty,mic
137	9836.0-37.0	2.1	2.2	0.11	12.4	0.0	88.6	2.63	Sd,f-mg,slty,mic
138	9837.0-38.0	0.31	0.36		11.5	0.0	83.4	2.65	Sd,f-mg,slty,mic

HALLIBURTON
SERVICES

TICKET NO. 58786600
14-DEC-83
BAKERSHIELD

RECEIVED
APR 23 1984
DIVISION OF OIL & GAS
COALINGA

FORMATION TESTING SERVICE REPORT

SOUTH
LEASE NAME

1
WELL NO.

2
TEST NO.

LEGAL LOCATION
SEC. 36 - TWP. 14S - RNG. 12E

FIELD AREA CHANNEY RANCH

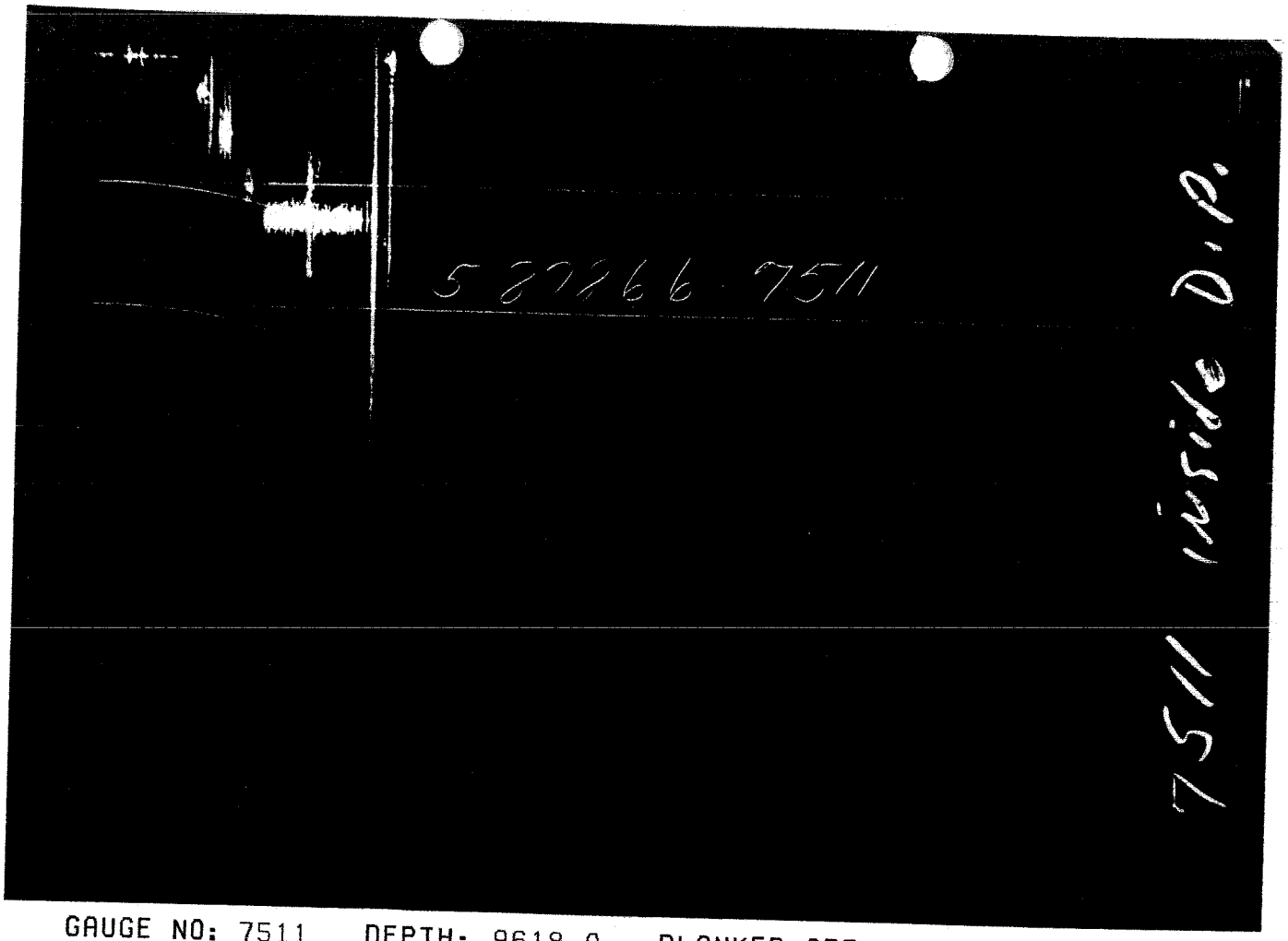
TESTED INTERVAL

COUNTY FRESNO

STATE CALIFORNIA

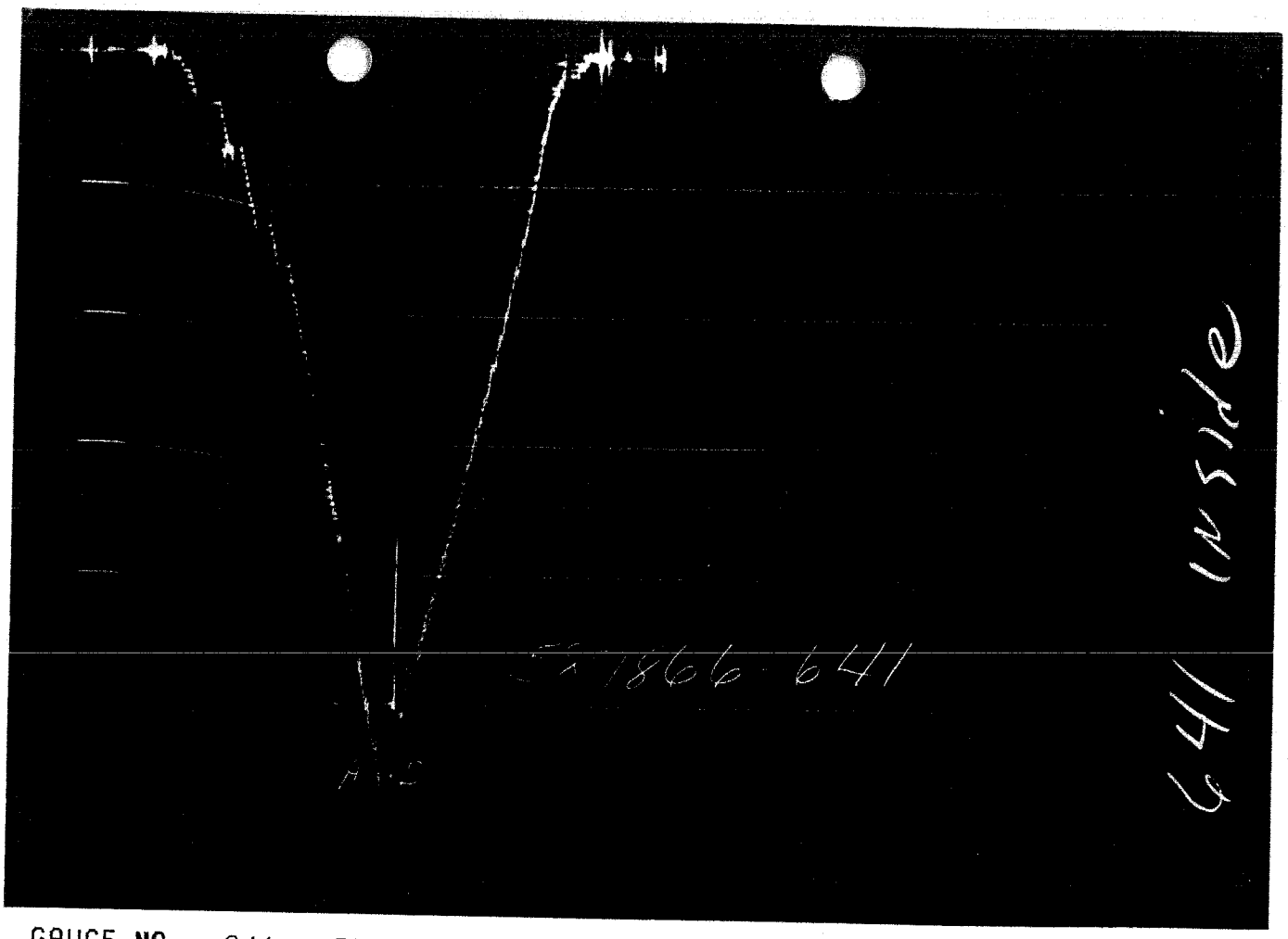
AMERICAN HUNTER EXPLORATION
LEASE OWNER/COMPANY NAME

019-21924



GAUGE NO: 7511 DEPTH: 9618.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	FINAL HYDROSTATIC					

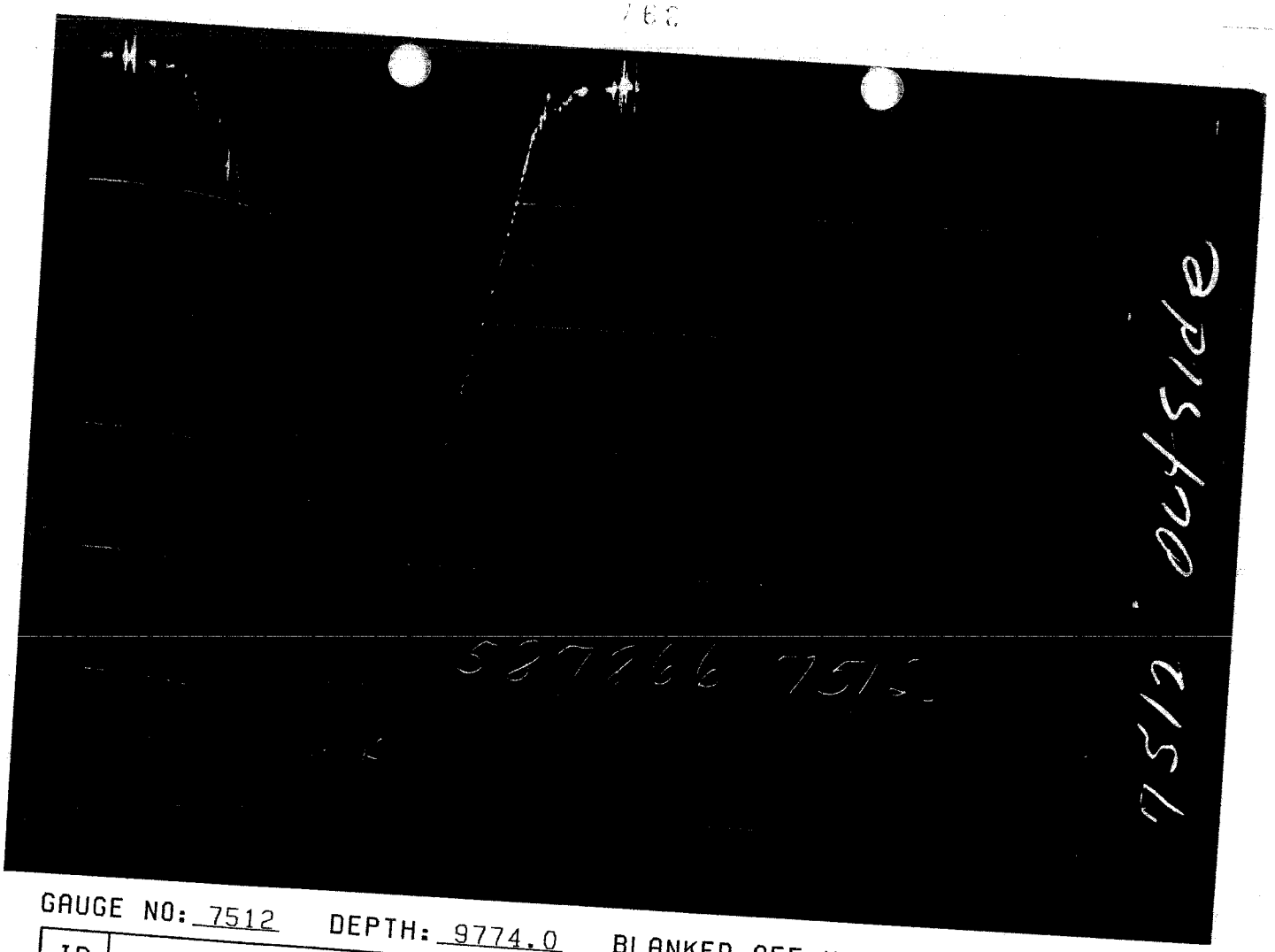


GAUGE NO: 641 DEPTH: 9634.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5469	5419.4			
B	FINAL HYDROSTATIC	5250	5419.4			

GAUGE NO: 1090 DEPTH: 9770.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5455	5484.4			
B	FINAL HYDROSTATIC	5308	5484.4			



GAUGE NO: 7512 DEPTH: 9774.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5498	5485.0			
B	FINAL HYDROSTATIC	5350	5485.0			

EQUIPMENT & HOLE DATA

FORMATION TESTED: _____
NET PAY (ft): _____
GROSS TESTED FOOTAGE: _____
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 8.750
ELEVATION (ft): 0
TOTAL DEPTH (ft): 9778.0
PACKER DEPTH(S) (ft): 9646, 9652
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 10.40
MUD VISCOSITY (sec): 38
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 120 @ 9777.0 ft

TICKET NUMBER: 58786600
DATE: 12-6-83 TEST NO: 8
TYPE DST: OPEN HOLE
HALLIBURTON CAMP: BAKERSFIELD
TESTER: R.D. LYONS
WITNESS: WALT ZURBA
DRILLING CONTRACTOR: MONTGOMERY

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE: _____
cu.ft. OF GAS: _____
cc OF OIL: _____
cc OF WATER: _____
cc OF MUD: _____
TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ °F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
WATER (FEET)	3000.0	8.33

RECOVERED:

3000 FEET OF WATER CUSHION
393 FEET OF DRILLING MUD

MEASURED FROM TESTER VALVE

REMARKS:

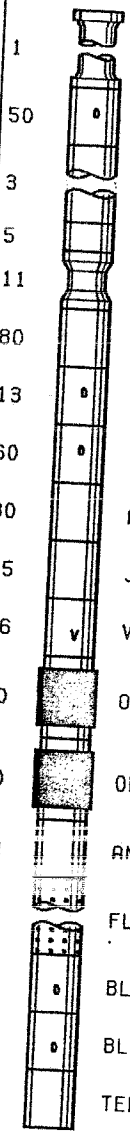
LOST PACKER SEAT

TYPE & SIZE MEASURING DEVICE: ______

TICKET NO: 58786600

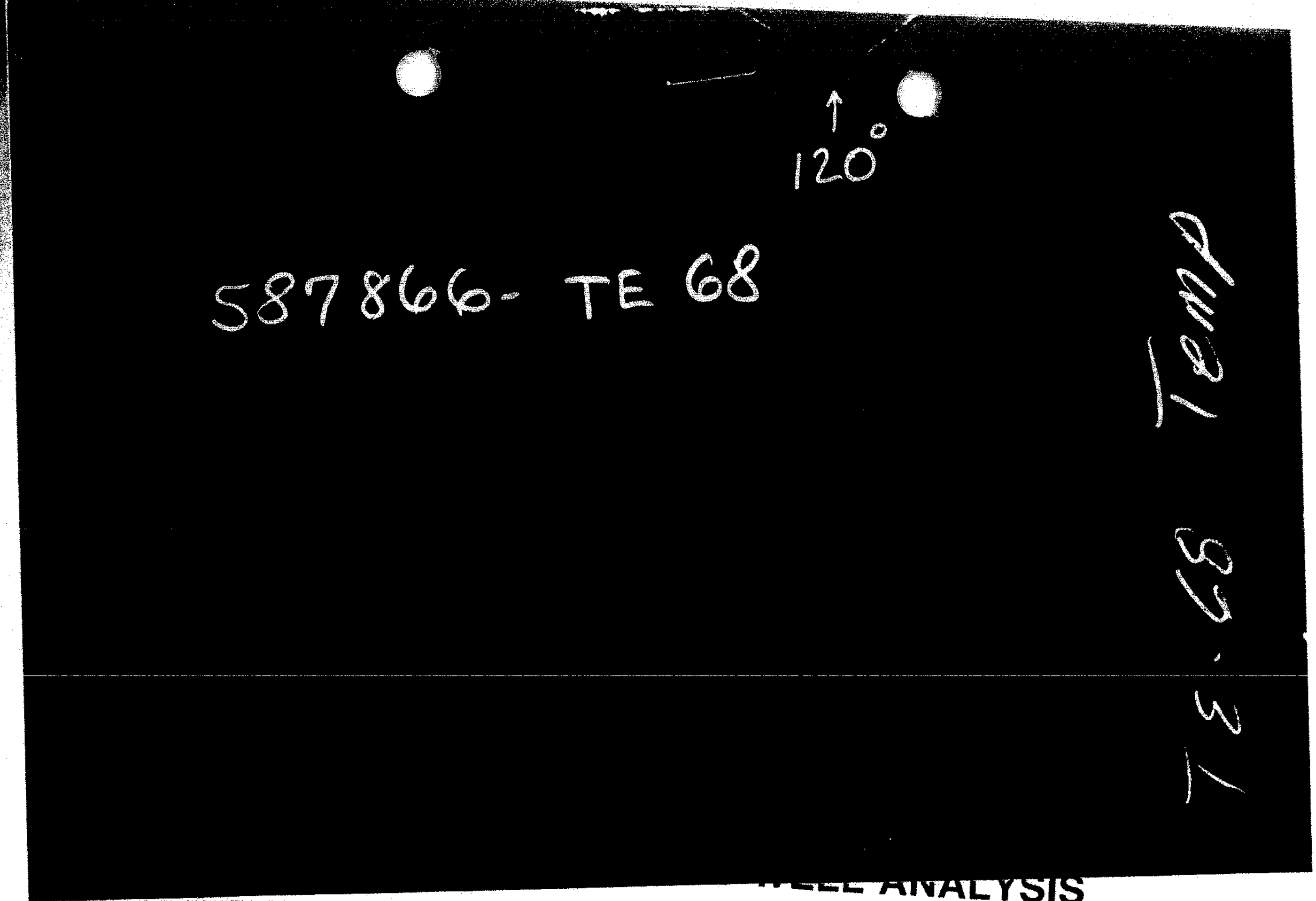
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
12-6-83					
0423					OPENED HYDROSPRING
0424					NO PACKER SEAT, PULLED LOOSE

TICKET NO. 58786600



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	5.000	4.276	9338.0	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	9339.0
3	DRILL COLLARS.....	6.000	3.000	273.0	
5	CROSSOVER.....	6.000	3.000	0.9	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	2.250	4.6	
80	AP RUNNING CASE.....	5.000	3.000	4.2	9618.0
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	9629.0
80	AP RUNNING CASE.....	5.000	3.000	4.2	9634.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9646.0
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9652.8
19	ANCHOR PIPE SAFETY			4.2	
20	FLUSH JOINT ANCHOR.....	5.000	2.370		
81	BLANKED-OFF RUNNING CASE.....	5.000		4.6	9770.0
81	BLANKED-OFF RUNNING CASE.....	5.000		3.9	9774.0
82	TEMPERATURE RUNNING CASE.....	5.000	2.440	4.1	9777.0
	TOTAL DEPTH				9778.0

EQUIPMENT DATA



ANALYSIS

Indicated Flow Capacity	$kh = \dfrac{1637\, Q_g\, T}{m}$	md-ft
Average Effective Permeability	$k = \dfrac{kh}{h}$	md
Skin Factor	$S = 1.151 \left[\dfrac{m(P^*) - m(P_f)}{m} - \text{LOG} \dfrac{kt}{\phi\, \mu\, c_t r_w^2} + 3.23 \right]$	—
Damage Ratio	$DR = \dfrac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\, mS}$	—
Indicated Flow Rate (Maximum)	$AOF_1 = \dfrac{Q_g\, m(P^*)}{m(P^*) - m(P_f)}$	MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g \sqrt{\dfrac{m(P^*)}{m(P^*) - m(P_f)}}$	MCFD
Approx. Radius of Investigation	$r_i = 0.032 \sqrt{\dfrac{kt}{\phi \mu c_t}}$	ft

SOUZA
LEASE NAME

1
WELL NO.

7
TEST NO.

9694.' - 9778.'
TESTED INTERVAL

AMERICAN HUNTER EXPLORATION LIMITED
LEASE OWNER/COMPANY NAME

LEGAL LOCATION
SEC. - TWP. - RNG.

36-14S-12E

FIELD
AREA

CHANNEY RANCH

COUNTY

FRESNO

STATE

CALIFORNIA SM

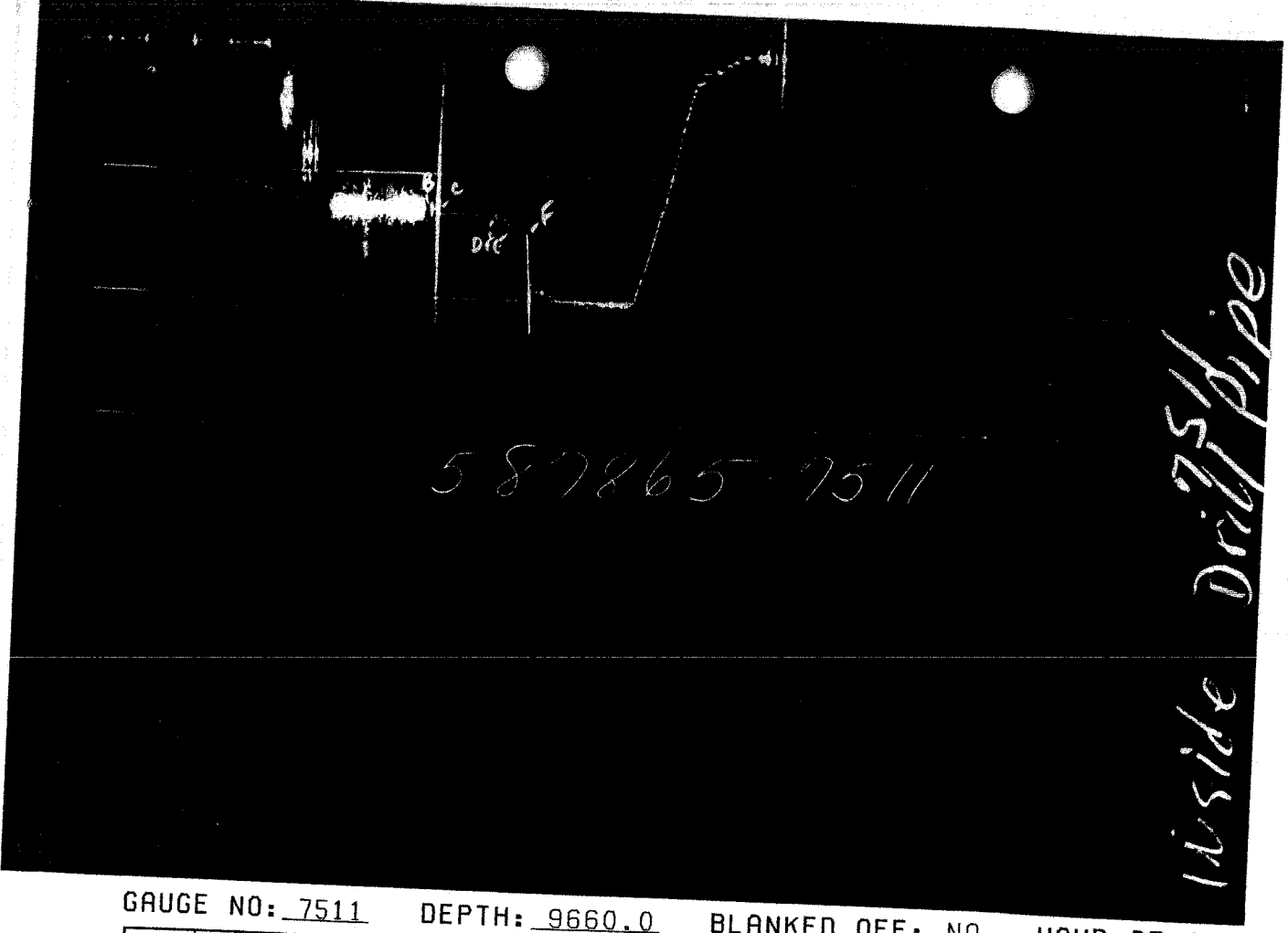
019-21924

HALLIBURTON
SERVICES

TICKET NO. 58786500
15-DEC-83
BAKERSFIELD

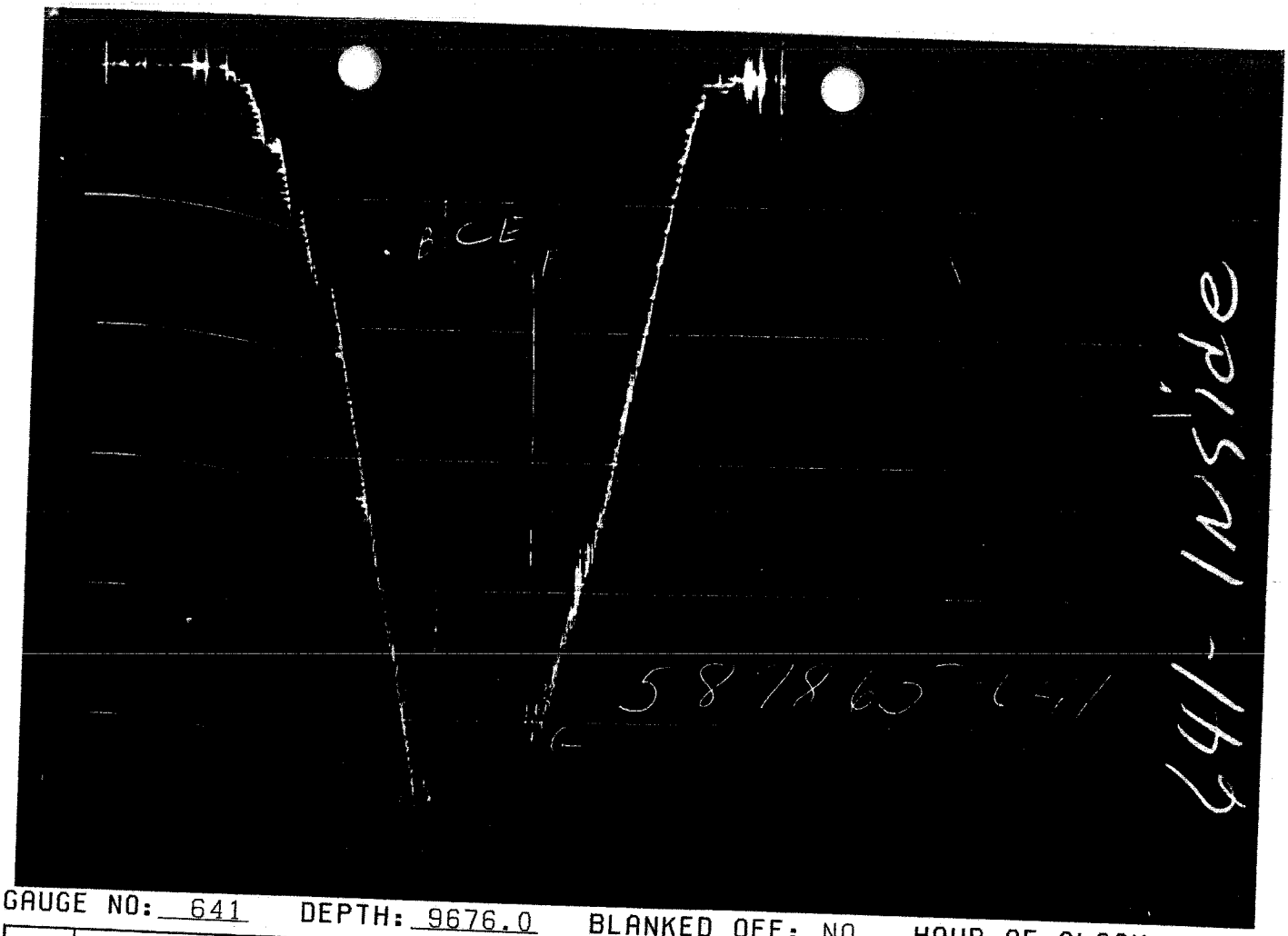
RECEIVED
APR 23 1984
DIVISION OF OIL & GAS
COALINGA

FORMATION TESTING SERVICE REPORT



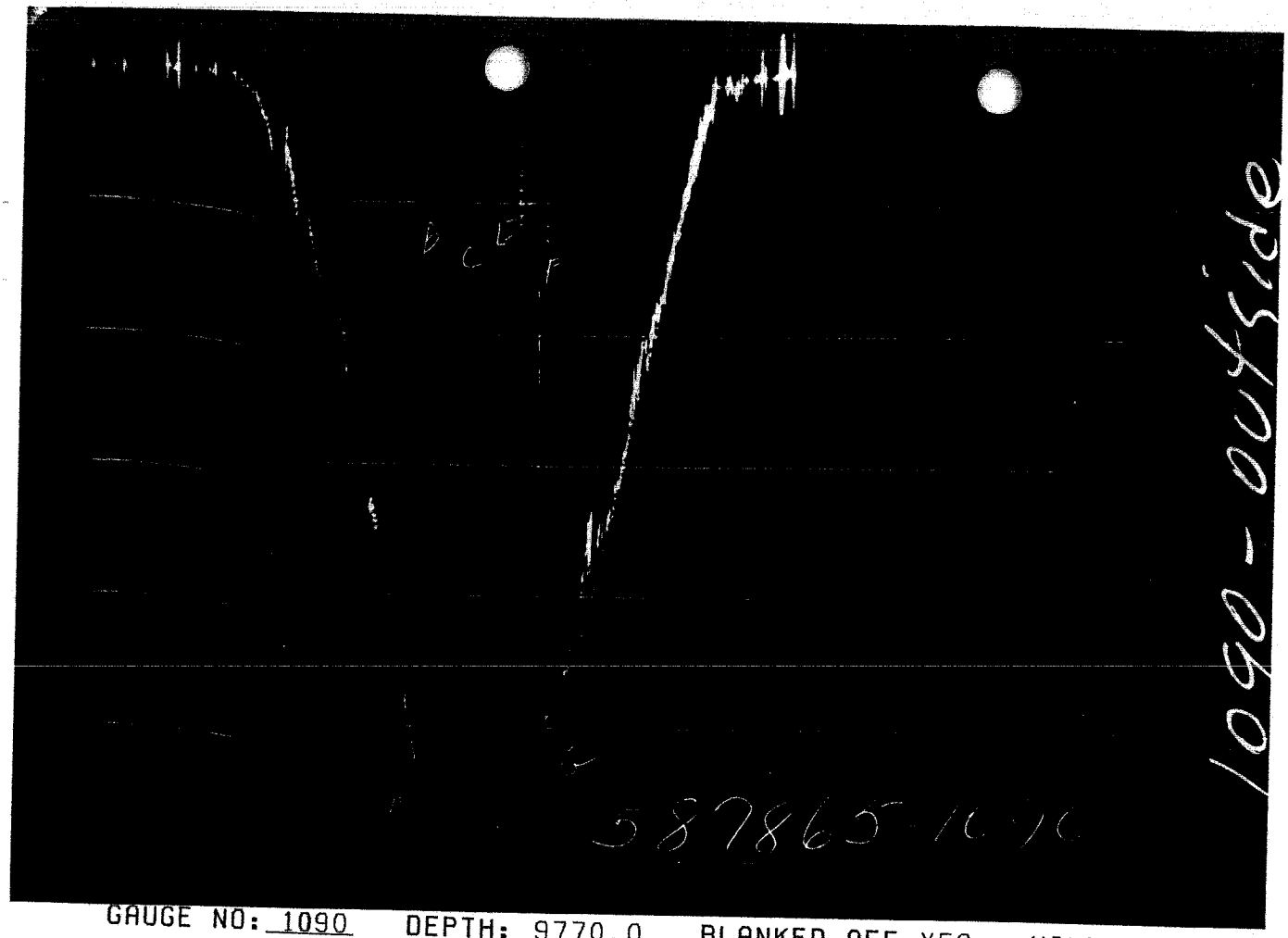
GAUGE NO: 7511 DEPTH: 9660.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW	1323	1294.2			
C	FINAL FIRST FLOW	2021	1294.2	10.0	10.6	F
C	INITIAL FIRST CLOSED-IN	2021	1294.2			
D	FINAL FIRST CLOSED-IN		1339.1	60.0	59.4	C
E	INITIAL SECOND FLOW		1339.1			
F	FINAL SECOND FLOW		1508.7	45.0	39.1	F
G	FINAL HYDROSTATIC					



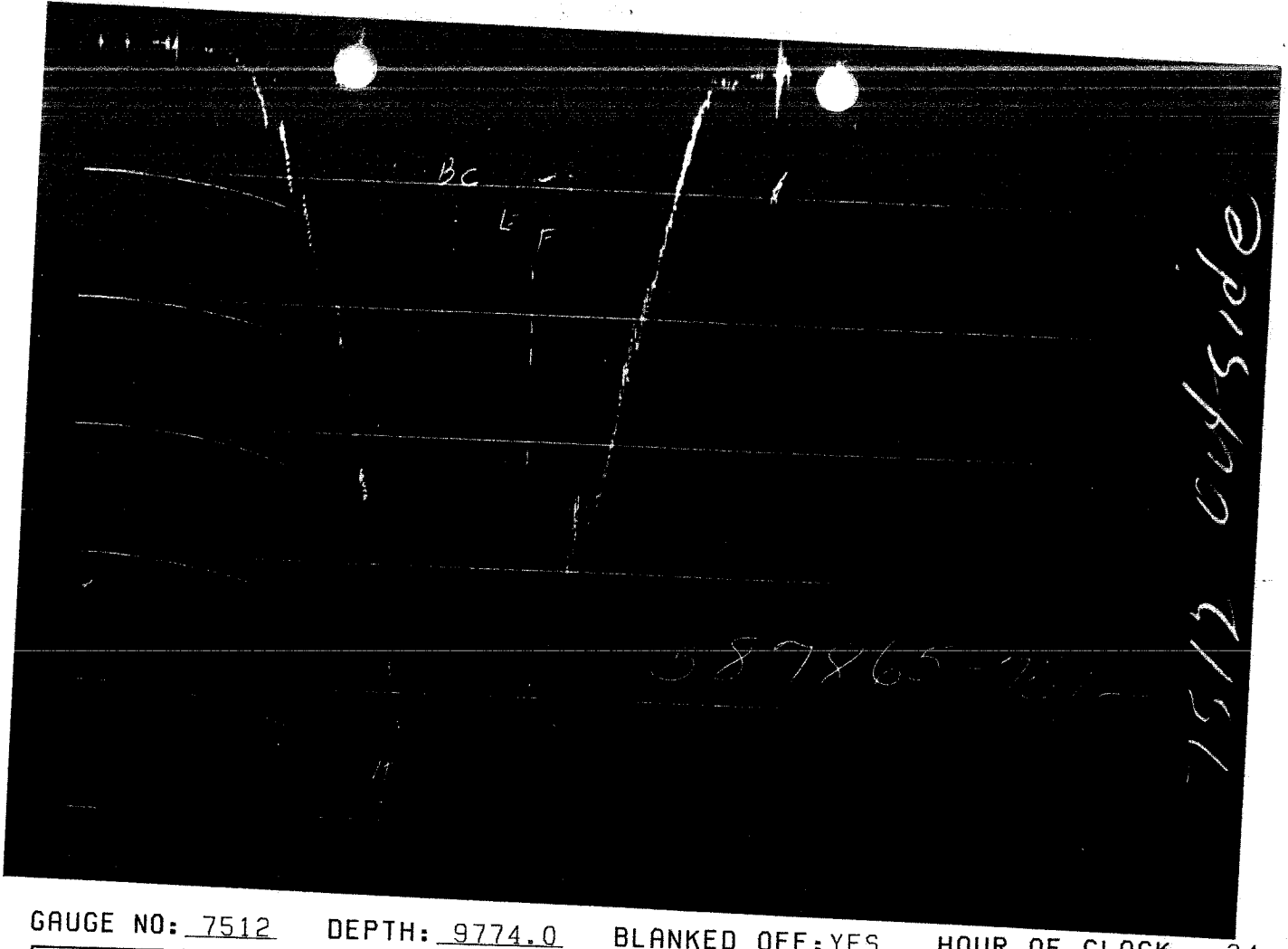
GAUGE NO: 641 DEPTH: 9676.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5543	5463.4			
B	INITIAL FIRST FLOW	1345	1387.6	10.0	10.6	F
C	FINAL FIRST FLOW	1345	1381.7			
C	INITIAL FIRST CLOSED-IN	1345	1381.7	60.0	59.4	C
D	FINAL FIRST CLOSED-IN	5561	5575.9			
E	INITIAL SECOND FLOW	1364	1399.4	45.0	39.1	F
F	FINAL SECOND FLOW	1530	1580.2			
G	FINAL HYDROSTATIC	5177	5132.4			



GAUGE NO: 1090 DEPTH: 9770.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5455	5463.4			
B	INITIAL FIRST FLOW	1371	1469.4	10.0	10.6	F
C	FINAL FIRST FLOW	1371	1415.2			
C	INITIAL FIRST CLOSED-IN	1371	1415.2	60.0	59.4	C
D	FINAL FIRST CLOSED-IN	5566	5586.4			
E	INITIAL SECOND FLOW	1389	1434.7	45.0	39.1	F
F	FINAL SECOND FLOW	1575	1625.8			
G	FINAL HYDROSTATIC	5235	5136.2			



GAUGE NO: 7512 DEPTH: 9774.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5461	5463.5			
B	INITIAL FIRST FLOW	1380	1476.2	10.0	10.6	F
C	FINAL FIRST FLOW	1380	1422.1			
C	INITIAL FIRST CLOSED-IN	1380	1422.1	60.0	59.4	C
D	FINAL FIRST CLOSED-IN	5590	5585.9			
E	INITIAL SECOND FLOW	1398	1443.8	45.0	39.1	F
F	FINAL SECOND FLOW	1586	1633.7			
G	FINAL HYDROSTATIC	5238	5144.6			

EQUIPMENT & HOLE DATA

FORMATION TESTED: _____
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 84.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 8.750
ELEVATION (ft): 0
TOTAL DEPTH (ft): 9778.0
PACKER DEPTH(S) (ft): 9688, 9694
FINAL SURFACE CHOKE (in): _____
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 10.40
MUD VISCOSITY (sec): 38
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 227 @ 9778.0 ft

TICKET NUMBER: 58786500
DATE: 12-5-83 TEST NO: 7
TYPE DST: OPEN HOLE
HALLIBURTON CAMP: BAKERSFIELD
TESTER: R.D. LYONS
WITNESS: WALT ZURBA
DRILLING CONTRACTOR: MONTGOMERY

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Pstg AT SURFACE: _____
cu.ft. OF GAS: _____
cc OF OIL: _____
cc OF WATER: _____
cc OF MUD: _____
TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ °F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
WATER (FEET)	3000.0	8.33

RECOVERED:

3000 FEET OF WATER CUSHION
1500 FEET OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

LOST PACKER SEAT DURING SECOND FLOW PERIOD.

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 58786500

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
12-5-83					
0225	BH				
0227					OPENED HYDROSPRING
0230					FAINT BLOW
0235					LIGHT BLOW
0335					CLOSED IN
0340					OPENED
0350					FAINT BUBBLE
0400					FAINT BLOW
0420					FAINT BLOW
					PACKER SEAT GAVE WAY
0425					CLOSED DCIP SAMPLER
					PULLED LOOSE

TICKET NO: 58786500

CLOCK NO: 28224 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 7511

DEPTH: 9660.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	1294.2			
C	2	10.6	1294.2	0.0		
			FIRST CLOSED-IN			
C	1	0.0	1294.2			
D	2	59.4	1339.1	45.0	9.0	0.071
			SECOND FLOW			
E	1	0.0	1339.1			
	2	5.0	1361.2	22.1		
	3	10.0	1368.2	7.0		
	4	15.0	1398.1	29.8		
	5	20.0	1422.3	24.2		
	6	25.0	1438.0	15.7		
	7	30.0	1461.0	23.1		
	8	35.0	1480.8	19.8		
F	9	39.1	1508.7	27.9		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$

REMARKS:
THIS GAUGE RAN ABOVE HYDROSPRING TESTER VALVE.

TICKET NO: 58786500

CLOCK NO: 26221 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 641

DEPTH: 9676.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
		FIRST FLOW			
B 1	0.0	1387.6			
2	2.0	1387.2	-0.4		
3	4.0	1384.3	-3.0		
4	6.0	1382.8	-1.5		
5	8.0	1382.8	0.0		
6	10.0	1382.8	0.0		
C 7	10.6	1381.7	-1.1		
		FIRST CLOSED-IN			
C 1	0.0	1381.7			
2	5.0	4049.5	2667.8	3.4	0.492
3	10.0	4555.2	3173.5	5.1	0.313
4	15.0	4865.1	3483.4	6.2	0.231
5	20.0	5064.0	3682.3	6.9	0.184
6	25.0	5196.9	3815.2	7.4	0.153
7	30.0	5295.6	3913.9	7.8	0.131
8	35.0	5368.4	3986.7	8.1	0.114
9	40.0	5424.3	4042.6	8.4	0.102
10	45.0	5473.1	4091.4	8.6	0.091
11	50.0	5514.8	4133.1	8.7	0.083
12	55.0	5550.3	4168.6	8.9	0.076
D 13	59.4	5575.9	4194.2	9.0	0.071
		SECOND FLOW			
E 1	0.0	1399.4			
2	5.0	1403.1	3.7		
3	10.0	1413.5	10.4		
4	15.0	1459.1	45.7		
5	20.0	1482.1	22.9		
6	25.0	1507.4	25.3		
7	30.0	1522.4	15.0		
8	35.0	1542.9	20.5		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$

REMARKS:

TICKET NO: 58786500

CLOCK NO: 26228 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 1090

DEPTH: 9770.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		FIRST FLOW			
B 1	0.0	1469.4			
2	2.0	1438.6	-30.8		
3	4.0	1421.7	-16.9		
4	6.0	1418.4	-3.3		
5	8.0	1418.0	-0.4		
6	10.0	1415.4	-2.6		
C 7	10.6	1415.2	-0.2		
		FIRST CLOSED-IN			
C 1	0.0	1415.2			
2	5.0	4198.0	2782.8	3.4	0.496
3	10.0	4642.9	3227.7	5.1	0.313
4	15.0	4912.2	3496.9	6.2	0.232
5	20.0	5089.2	3673.9	6.9	0.184
6	25.0	5215.6	3800.4	7.4	0.153
7	30.0	5312.1	3896.9	7.8	0.131
8	35.0	5382.2	3967.0	8.1	0.114
9	40.0	5441.0	4025.8	8.4	0.102
10	45.0	5489.2	4073.9	8.5	0.092
11	50.0	5529.0	4113.8	8.7	0.083
12	55.0	5563.4	4148.2	8.9	0.076
D 13	59.4	5586.4	4171.2	9.0	0.071
		SECOND FLOW			
E 1	0.0	1434.7			
2	5.0	1435.1	0.4		
3	10.0	1443.2	8.2		
4	15.0	1495.4	52.1		
5	20.0	1511.1	15.8		
6	25.0	1548.1	36.9		
7	30.0	1560.5	12.4		
8	35.0	1579.6	19.1		
F 9	39.1	1625.8	46.2		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

TICKET NO: 58786500

CLOCK NO: 13826 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 7512

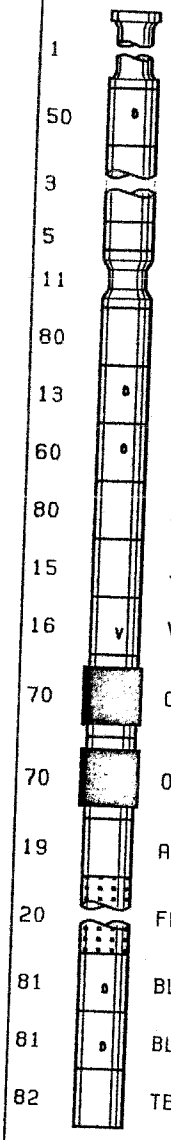
DEPTH: 9774.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	1476.2			
2	2.0	1448.3	-27.9		
3	4.0	1430.5	-17.8		
4	6.0	1425.1	-5.4		
5	8.0	1424.9	-0.2		
6	10.0	1421.5	-3.4		
C 7	10.6	1422.1	0.6		
FIRST CLOSED-IN					
C 1	0.0	1422.1			
2	5.0	4047.3	2625.2	3.4	0.496
3	10.0	4552.1	3130.0	5.1	0.313
4	15.0	4869.2	3447.1	6.2	0.232
5	20.0	5066.7	3644.6	6.9	0.184
6	25.0	5200.9	3778.8	7.4	0.153
7	30.0	5298.0	3875.9	7.8	0.131
8	35.0	5375.0	3952.9	8.1	0.114
9	40.0	5436.1	4014.0	8.4	0.102
10	45.0	5485.2	4063.1	8.6	0.091
11	50.0	5525.9	4103.8	8.7	0.083
12	55.0	5562.2	4140.1	8.9	0.076
D 13	59.4	5585.9	4163.8	9.0	0.071
SECOND FLOW					
E 1	0.0	1443.8			
2	5.0	1439.9	-3.9		
3	10.0	1451.7	11.8		
4	15.0	1502.4	50.7		
5	20.0	1523.4	21.0		
6	25.0	1555.1	31.6		
7	30.0	1574.0	18.9		
8	35.0	1583.0	9.0		
F 9	39.1	1633.7	50.7		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$

REMARKS:

TICKET NO. 58786500



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	5.000	4.276	9393.0	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	9382.0
3	DRILL COLLARS.....	6.000	3.000	273.0	
5	CROSSOVER.....	6.000	3.000	0.9	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	2.250	4.6	
80	AP RUNNING CASE.....	5.000	3.000	4.2	9660.0
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	9671.0
80	AP RUNNING CASE.....	5.000	3.000	4.2	9676.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9688.0
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9694.0
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.250	4.2	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	65.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.6	9770.0
81	BLANKED-OFF RUNNING CASE.....	5.000		3.9	9774.0
82	TEMPERATURE RUNNING CASE.....	5.000		4.1	9778.0
	TOTAL DEPTH				9778.0

EQUIPMENT DATA

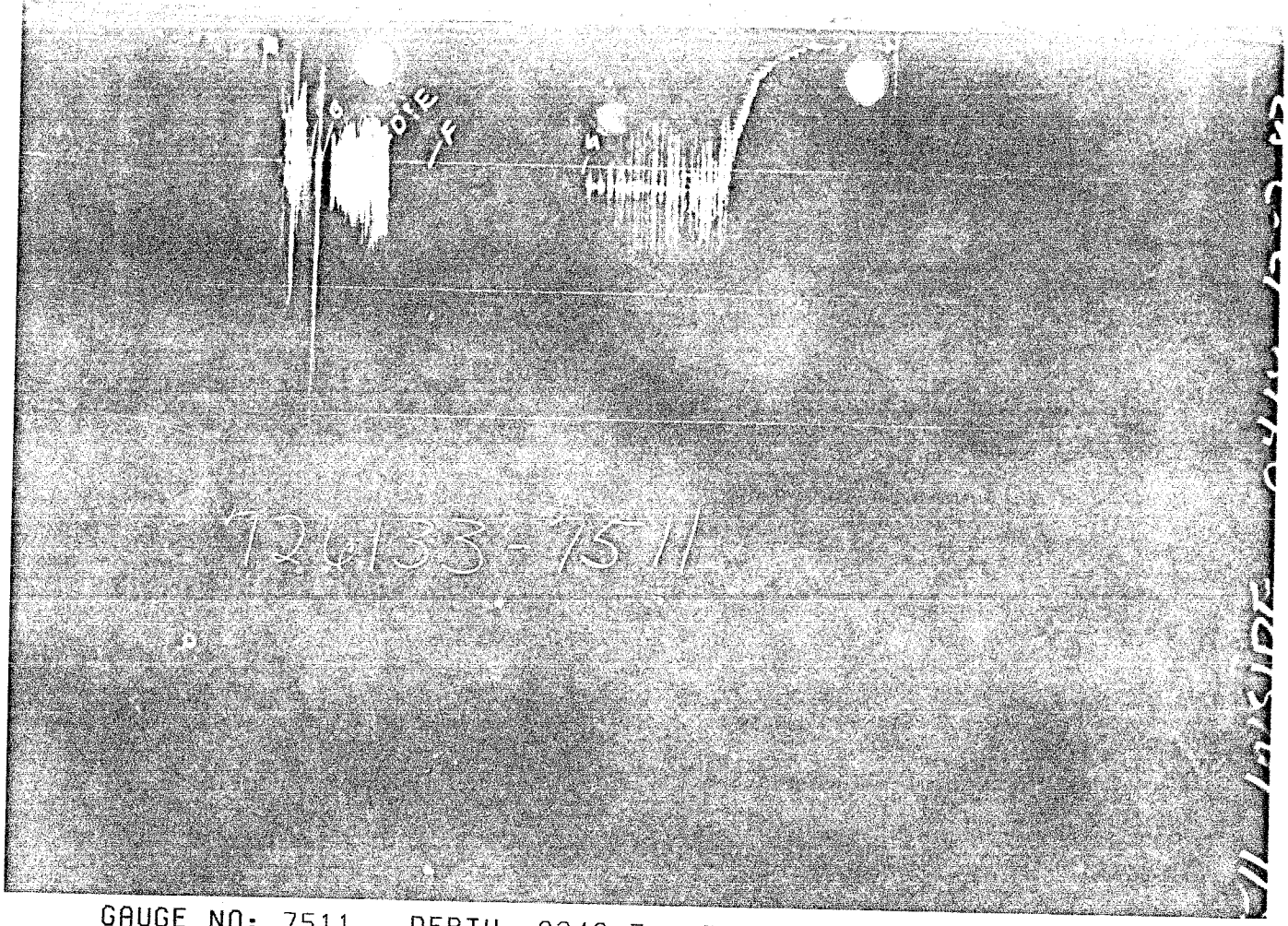
HALLIBURTON
SERVICES

TICKET NO. 72613300
13-DEC-83
BAKERSFIELD
019-21924

RECEIVED
APR 09 1984
DIVISION OF OIL & GAS
COALINGA

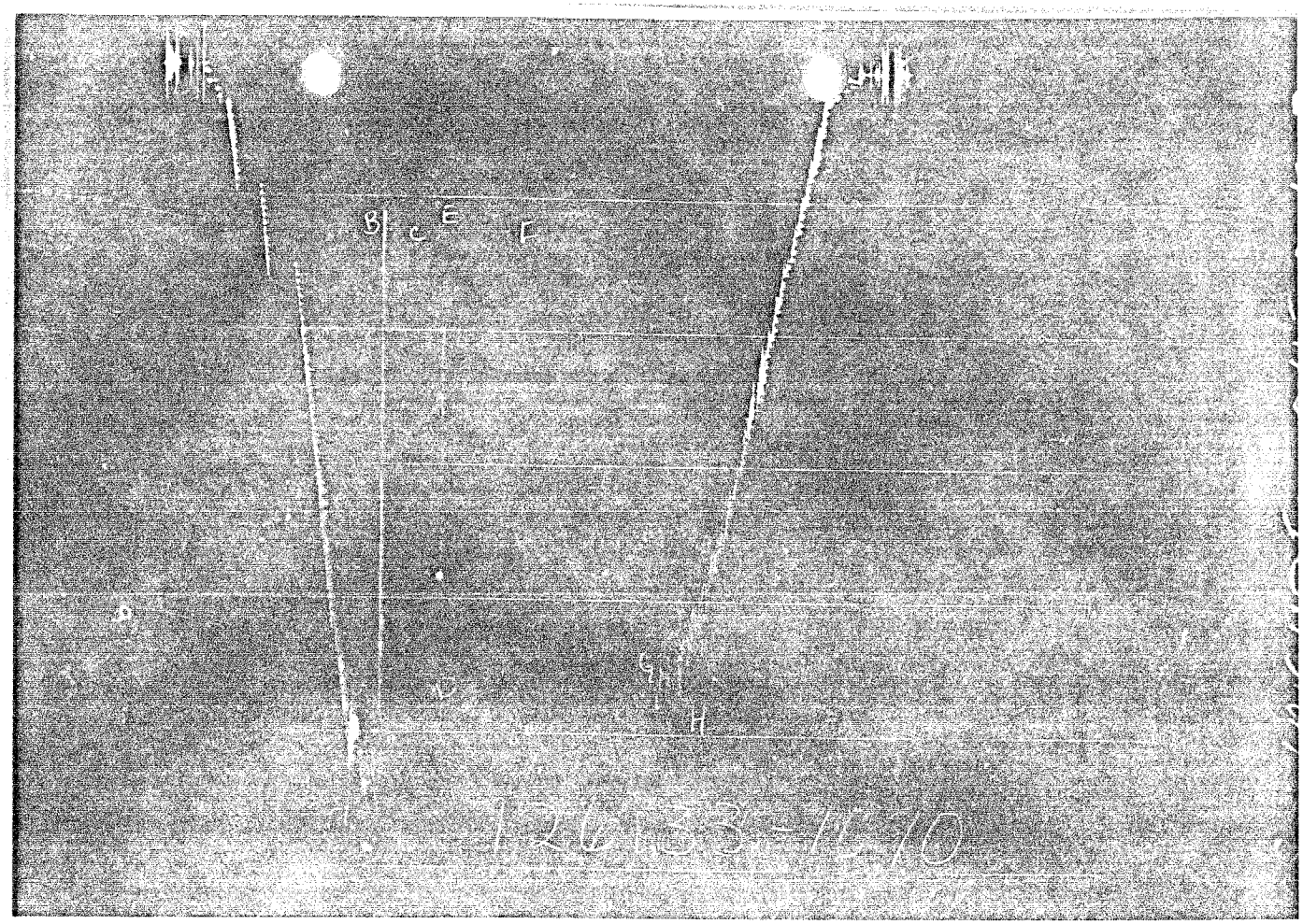
FORMATION TESTING SERVICE REPORT

SEC. - TWP. - RNG. 36-14S-12E
FIELD AREA CHANNEY RANCH
COUNTY FRESNO
STATE CALIFORNIA BC



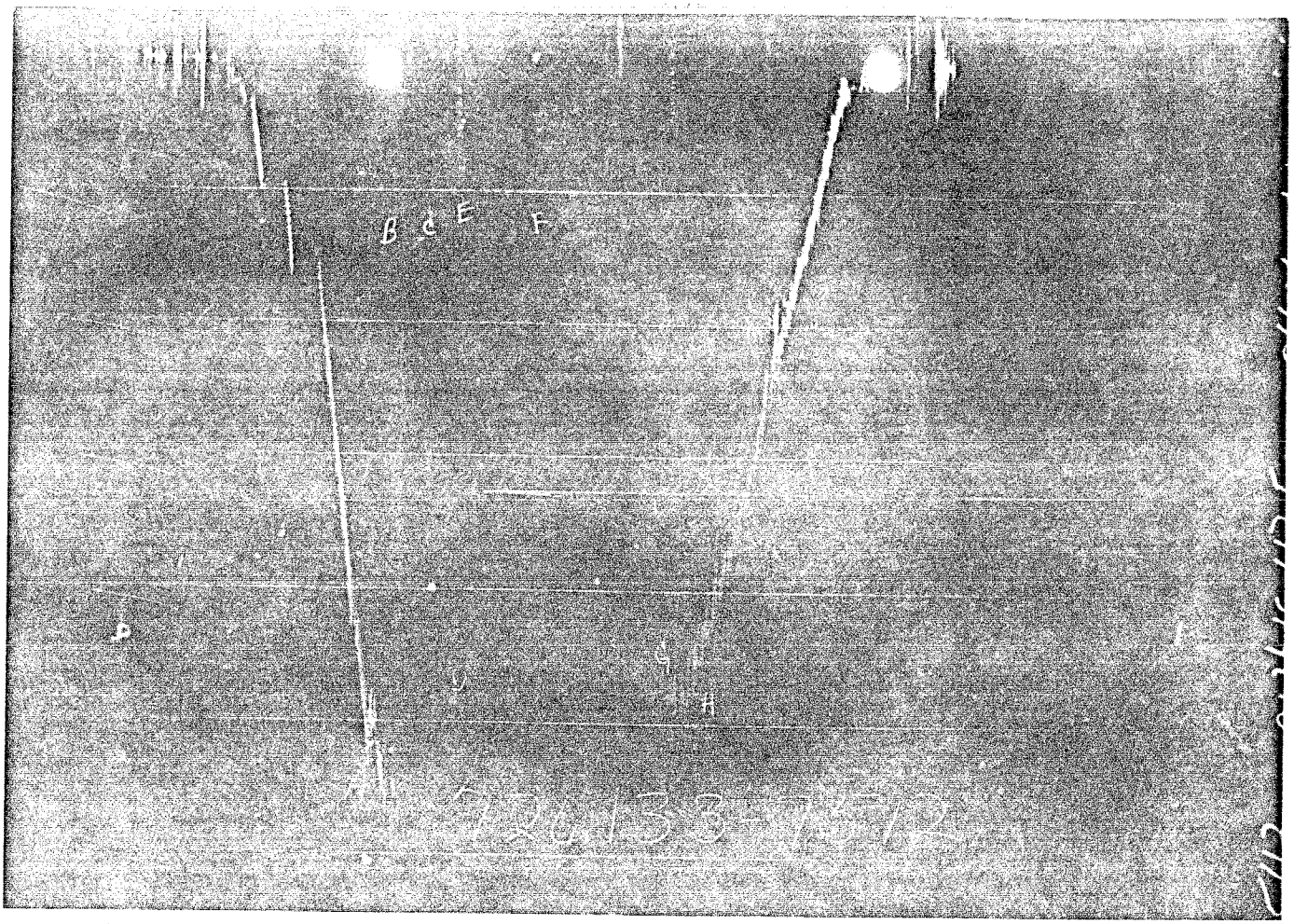
GAUGE NO: 7511 DEPTH: 9342.7 BLANKED OFF: NO HOUR OF CLOCK: 2

ID	DESCRIPTION	PRESSURE		TIME		TYP
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW	1088.8		11.0	11.1	F
C	FINAL FIRST FLOW	1096.7				
C	INITIAL FIRST CLOSED-IN	1096.7		60.0	59.8	C
D	FINAL FIRST CLOSED-IN	1103.9				
E	INITIAL SECOND FLOW	1103.9		72.0	73.0	F
F	FINAL SECOND FLOW	1122.5				
F	INITIAL SECOND CLOSED-IN	1122.5		180.0	179.0	C
G	FINAL SECOND CLOSED-IN	1139.3				
H	FINAL HYDROSTATIC					



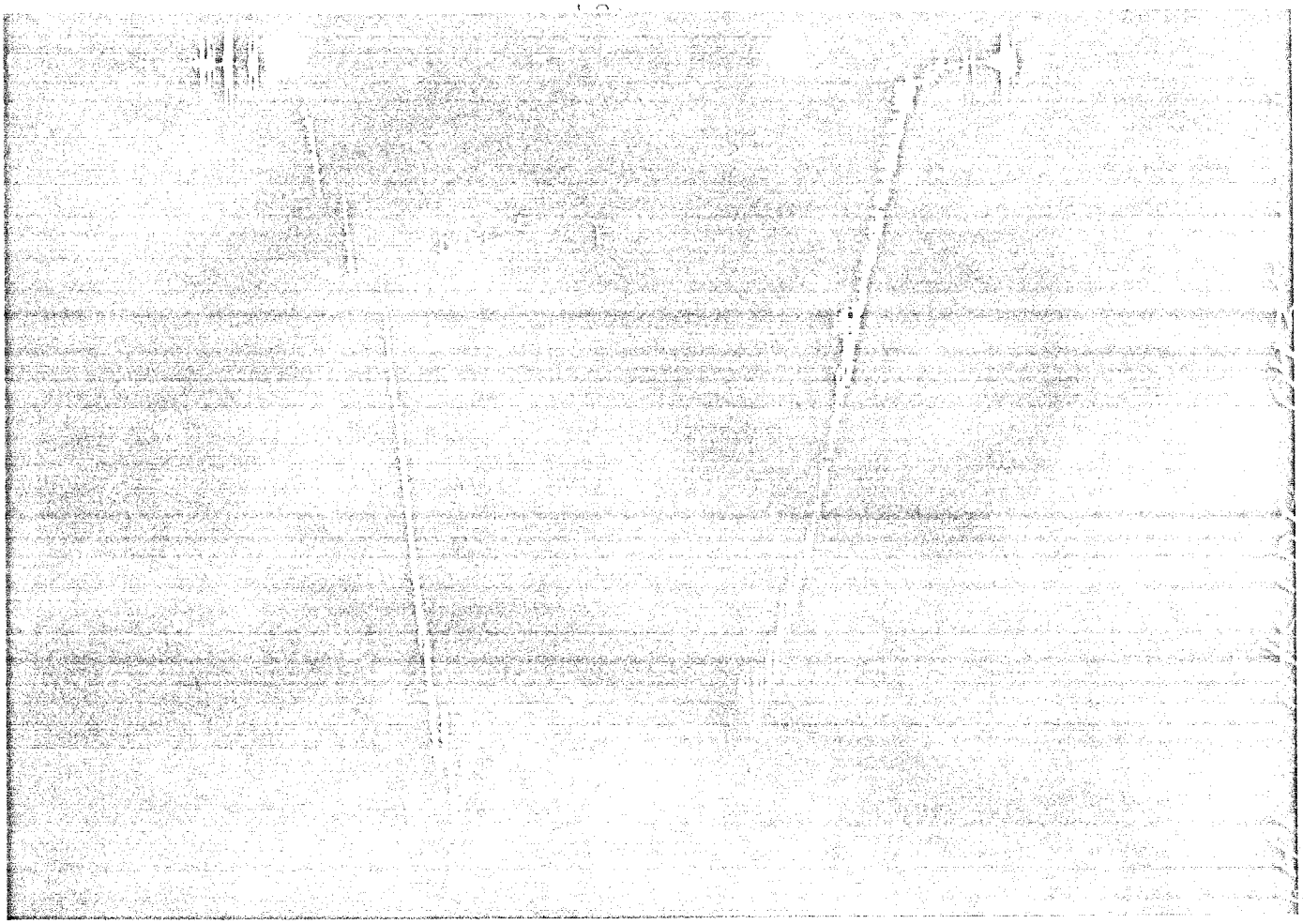
GAUGE NO: 1090 DEPTH: 9358.8 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5548	5344.7			
B	INITIAL FIRST FLOW	1260	1232.5	11.0	11.1	F
C	FINAL FIRST FLOW	1260	1232.5			
C	INITIAL FIRST CLOSED-IN	1260	1232.5	60.0	59.8	C
D	FINAL FIRST CLOSED-IN	4499	4457.1			
E	INITIAL SECOND FLOW	1278	1254.4	72.0	73.0	F
F	FINAL SECOND FLOW	1278	1243.0			
F	INITIAL SECOND CLOSED-IN	1278	1243.0	180.0	179.0	C
G	FINAL SECOND CLOSED-IN	4683	4661.7			
H	FINAL HYDROSTATIC	5419	5086.0			



GAUGE NO: 7512 DEPTH: 9422.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5535	5390.6			
B	INITIAL FIRST FLOW	1287	1297.6	11.0	11.1	F
C	FINAL FIRST FLOW	1287	1271.2			
C	INITIAL FIRST CLOSED-IN	1287	1271.2	60.0	59.8	C
D	FINAL FIRST CLOSED-IN	4460	4473.7			
E	INITIAL SECOND FLOW	1287	1304.9	72.0	73.0	F
F	FINAL SECOND FLOW	1287	1274.5			
F	INITIAL SECOND CLOSED-IN	1287	1274.5	180.0	179.0	C
G	FINAL SECOND CLOSED-IN	4664	4683.9			
H	FINAL HYDROSTATIC	5424	5127.2			



24

GAUGE NO: 641 DEPTH: 9425.9 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5543	5405.9			
B	INITIAL FIRST FLOW	1290	1289.1	11.0	11.1	F
C	FINAL FIRST FLOW	1290	1272.5			
C	INITIAL FIRST CLOSED-IN	1290	1272.5	60.0	59.8	C
D	FINAL FIRST CLOSED-IN	4481	4496.0			
E	INITIAL SECOND FLOW	1272	1300.2	72.0	73.0	F
F	FINAL SECOND FLOW	1272	1275.8			
F	INITIAL SECOND CLOSED-IN	1272	1275.8	180.0	179.0	C
G	FINAL SECOND CLOSED-IN	4540	4701.7			
H	FINAL HYDROSTATIC	5433	5141.0			

EQUIPMENT & HOLE DATA

FORMATION TESTED: _____
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 53.4
ALL DEPTHS MEASURED FROM: KB
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 8.750
ELEVATION (ft): 0
TOTAL DEPTH (ft): 9433.0
PACKER DEPTH(S) (ft): 9374, 9380
FINAL SURFACE CHOKE (in): _____
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 10.50
MUD VISCOSITY (sec): 46
ESTIMATED HOLE TEMP. (°F): 220
ACTUAL HOLE TEMP. (°F): ___ @ _____ ft

TICKET NUMBER: 72613300

DATE: 12-2-83 TEST NO: 6

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: BAKERSFIELD

TESTER: DUNLAP / KOUTROULIS

WITNESS: ZURBA

DRILLING CONTRACTOR: MONTGOMERY

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
_____	____ @ ____°F	_____ ppm
_____	____ @ ____°F	_____ ppm
_____	____ @ ____°F	_____ ppm
_____	____ @ ____°F	_____ ppm
_____	____ @ ____°F	_____ ppm
_____	____ @ ____°F	_____ ppm

SAMPLER DATA

Psig AT SURFACE: _____
cu.ft. OF GAS: _____
cc OF OIL: _____
cc OF WATER: _____
cc OF MUD: _____
TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ ___°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
WATER (FT.)	2700.0	8.33
_____	_____	_____

RECOVERED:

2700' OF CUSHION
150' OF DRILLING MUD ABOVE CUSHION

MEASURED FROM TESTER VALVE

REMARKS:

CLOCK ON TE-68 SLIPPED AND WOULD NOT RECORD. CHART NOT SENT IN FOR PROCESSING.

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 72613300

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
12-2-83					
0530					MADE UP TOOLS
0700					RAN IN HOLE
1045	1/4"BH				OPENED TOOL WITH A FAINT BLOW
					FOR 2 MINUTES, THEN DIED.
1056					CLOSED TOOL
1156	1/4"BH				OPENED TOOL WITH NO BLOW
1308					CLOSED TOOL
1608					CLOSED BY-PASS AND PULLED OUT OF
					HOLE.

TICKET NO: 72613300

CLOCK NO: 9661 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 1090

DEPTH: 9358.8

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	1232.5			
	2	2.0	1234.0	1.5		
	3	4.0	1239.0	5.0		
	4	6.0	1239.0	0.0		
	5	8.0	1239.0	0.0		
	6	10.0	1234.1	-4.8		
C	7	11.1	1232.5	-1.7		
			FIRST CLOSED-IN			
C	1	0.0	1232.5			
	2	4.0	1601.1	368.6	2.9	0.580
	3	8.0	1939.7	707.2	4.7	0.378
	4	12.0	2285.4	1052.9	5.8	0.286
	5	16.0	2635.4	1402.9	6.6	0.229
	6	20.0	2930.4	1697.9	7.1	0.192
	7	24.0	3217.6	1985.1	7.6	0.165
	8	28.0	3440.2	2207.7	8.0	0.145
	9	32.0	3644.1	2411.6	8.3	0.130
	10	36.0	3812.0	2579.6	8.5	0.117
	11	40.0	3951.3	2718.8	8.7	0.107
	12	44.0	4084.7	2852.2	8.9	0.098
	13	48.0	4190.8	2958.3	9.0	0.091
	14	52.0	4291.5	3059.1	9.2	0.084
	15	56.0	4380.3	3147.8	9.3	0.079
D	16	59.8	4457.1	3224.6	9.4	0.074
			SECOND FLOW			
E	1	0.0	1254.4			
	2	10.0	1255.8	1.5		
	3	20.0	1251.4	-4.5		
	4	30.0	1242.5	-8.9		
	5	40.0	1240.8	-1.7		
	6	50.0	1243.8	3.0		
	7	60.0	1243.8	0.0		
	8	70.0	1243.8	0.0		
F	9	73.0	1243.0	-0.7		
			SECOND CLOSED-IN			
F	1	0.0	1243.0			
	2	10.0	1593.9	350.8	9.0	0.973
	3	20.0	1947.1	704.1	16.1	0.717
	4	30.0	2313.3	1070.3	22.1	0.580
	5	40.0	2664.4	1421.4	27.1	0.492
	6	50.0	2992.6	1749.5	31.3	0.429
	7	60.0	3278.0	2034.9	35.0	0.381
	8	70.0	3535.0	2292.0	38.2	0.343

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	9	80.0	3738.1	2495.1	41.0	0.312
	10	90.0	3911.7	2668.6	43.5	0.287
	11	100.0	4058.0	2815.0	45.7	0.265
	12	110.0	4175.1	2932.1	47.7	0.247
	13	120.0	4278.8	3035.8	49.5	0.231
	14	130.0	4365.0	3122.0	51.1	0.217
	15	140.0	4440.1	3197.1	52.5	0.204
	16	150.0	4505.7	3262.7	53.9	0.193
	17	160.0	4563.0	3319.9	55.1	0.184
	18	170.0	4617.9	3374.8	56.3	0.175
G	19	179.0	4661.7	3418.7	57.2	0.167

REMARKS:

TICKET NO: 72613300

CLOCK NO: 26221 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 7512

DEPTH: 9422.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	1297.6			
	2	2.0	1289.0	-8.6		
	3	4.0	1291.0	2.1		
	4	6.0	1288.8	-2.2		
	5	8.0	1283.0	-5.8		
	6	10.0	1273.8	-9.2		
C	7	11.1	1271.2	-2.6		
			FIRST CLOSED-IN			
C	1	0.0	1271.2			
	2	4.0	1636.0	364.8	3.0	0.575
	3	8.0	1981.6	710.5	4.6	0.379
	4	12.0	2337.3	1066.1	5.8	0.286
	5	16.0	2694.2	1423.0	6.6	0.229
	6	20.0	3005.6	1734.4	7.1	0.192
	7	24.0	3261.6	1990.5	7.6	0.165
	8	28.0	3481.4	2210.2	8.0	0.145
	9	32.0	3664.8	2393.6	8.3	0.129
	10	36.0	3832.2	2561.1	8.5	0.117
	11	40.0	3976.0	2704.8	8.7	0.106
	12	44.0	4099.4	2828.3	8.9	0.098
	13	48.0	4206.3	2935.1	9.0	0.091
	14	52.0	4307.2	3036.1	9.2	0.084
	15	56.0	4397.0	3125.9	9.3	0.079
D	16	59.8	4473.7	3202.5	9.4	0.074
			SECOND FLOW			
E	1	0.0	1304.9			
	2	10.0	1287.6	-17.2		
	3	20.0	1282.2	-5.4		
	4	30.0	1272.1	-10.1		
	5	40.0	1270.4	-1.7		
	6	50.0	1273.0	2.6		
	7	60.0	1273.0	0.0		
	8	70.0	1273.0	0.0		
F	9	73.0	1274.5	1.5		
			SECOND CLOSED-IN			
F	1	0.0	1274.5			
	2	10.0	1595.3	320.8	8.9	0.973
	3	20.0	1947.6	673.0	16.2	0.716
	4	30.0	2315.9	1041.4	22.1	0.580
	5	40.0	2686.5	1412.0	27.1	0.492
	6	50.0	3021.6	1747.1	31.3	0.429
	7	60.0	3316.2	2041.7	35.0	0.380
	8	70.0	3565.0	2290.5	38.2	0.343

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	9	80.0	3762.4	2487.9	41.0	0.312
	10	90.0	3933.1	2658.6	43.5	0.287
	11	100.0	4072.7	2798.2	45.7	0.265
	12	110.0	4188.5	2914.0	47.7	0.247
	13	120.0	4293.5	3019.0	49.5	0.231
	14	130.0	4384.8	3110.3	51.1	0.217
	15	140.0	4462.9	3188.4	52.6	0.204
	16	150.0	4531.4	3256.8	53.9	0.193
	17	160.0	4589.6	3315.1	55.1	0.183
	18	170.0	4643.2	3368.7	56.3	0.175
G	19	179.0	4683.9	3409.3	57.2	0.167

REMARKS:

TICKET NO: 72613300

CLOCK NO: 18754 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 641

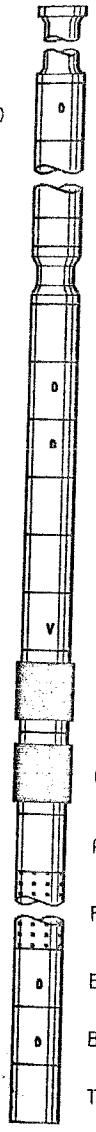
DEPTH: 9425.9

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	1289.1			
	2	2.0	1285.8	-3.3		
	3	4.0	1287.1	1.3		
	4	6.0	1285.4	-1.7		
	5	8.0	1281.0	-4.4		
	6	10.0	1274.3	-6.7		
C	7	11.1	1272.5	-1.8		
			FIRST CLOSED-IN			
C	1	0.0	1272.5			
	2	4.0	1618.1	345.7	2.9	0.579
	3	8.0	1973.0	700.6	4.7	0.378
	4	12.0	2317.8	1045.3	5.8	0.284
	5	16.0	2656.5	1384.0	6.6	0.229
	6	20.0	2957.0	1684.6	7.1	0.192
	7	24.0	3245.2	1972.8	7.6	0.165
	8	28.0	3473.0	2200.5	8.0	0.145
	9	32.0	3666.2	2393.7	8.3	0.130
	10	36.0	3845.4	2572.9	8.5	0.117
	11	40.0	3996.9	2724.4	8.7	0.106
	12	44.0	4127.2	2854.7	8.9	0.098
	13	48.0	4240.7	2968.3	9.0	0.090
	14	52.0	4337.8	3065.3	9.2	0.084
	15	56.0	4427.2	3154.7	9.3	0.079
D	16	59.8	4496.0	3223.5	9.4	0.074
			SECOND FLOW			
E	1	0.0	1300.2			
	2	10.0	1290.2	-10.0		
	3	20.0	1287.4	-2.8		
	4	30.0	1276.7	-10.7		
	5	40.0	1276.7	0.0		
	6	50.0	1275.4	-1.3		
	7	60.0	1275.4	0.0		
	8	70.0	1275.4	0.0		
F	9	73.0	1275.8	0.4		
			SECOND CLOSED-IN			
F	1	0.0	1275.8			
	2	10.0	1606.3	330.5	8.9	0.973
	3	20.0	1973.4	697.6	16.2	0.716
	4	30.0	2351.3	1075.5	22.1	0.580
	5	40.0	2711.1	1435.3	27.1	0.492
	6	50.0	3033.1	1757.3	31.3	0.429
	7	60.0	3321.9	2046.1	35.0	0.381
	8	70.0	3567.5	2291.7	38.2	0.343

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	9	80.0	3780.7	2504.9	41.0	0.312
	10	90.0	3954.8	2679.0	43.5	0.287
	11	100.0	4095.0	2819.3	45.7	0.265
	12	110.0	4215.2	2939.4	47.7	0.247
	13	120.0	4316.3	3040.5	49.5	0.231
	14	130.0	4403.5	3127.7	51.1	0.217
	15	140.0	4477.1	3201.3	52.6	0.204
	16	150.0	4548.4	3272.7	53.9	0.193
	17	160.0	4604.4	3328.6	55.1	0.184
	18	170.0	4658.2	3382.4	56.3	0.175
G	19	179.0	4701.7	3425.9	57.2	0.167

REMARKS:

TICKET NO. 72613300



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	5.000	4.276	9052.1	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	9052.0
3	DRILL COLLARS.....	6.000	2.750	283.0	
5	CROSSOVER.....	6.000	3.000	0.9	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	2.250	4.6	
80	AP RUNNING CASE.....	5.000	3.000	4.2	9342.7
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	9356.6
80	AP RUNNING CASE.....	5.000	3.000	4.2	9358.8
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9373.8
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9379.6
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.250	4.2	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	35.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.6	9422.0
81	BLANKED-OFF RUNNING CASE.....	5.000		3.9	9425.9
82	TEMPERATURE RUNNING CASE.....	5.000		4.1	9432.0
	TOTAL DEPTH				9433.0

EQUIPMENT DATA

HALLIBURTON

SERVICES

TICKET NO. 58786300

15-DEC-83

BAKERSFIELD

019-21924

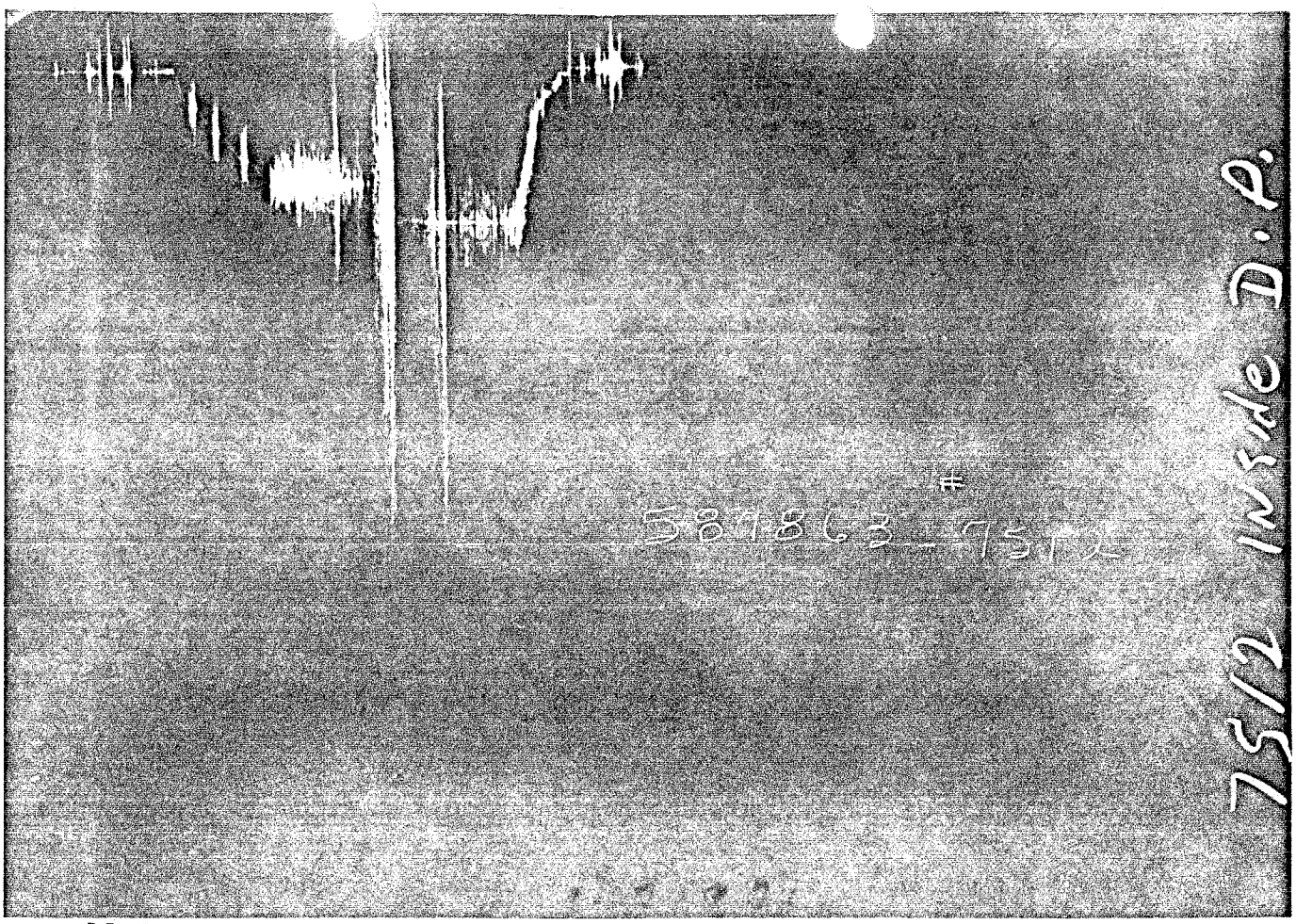
RECEIVED

APR 09 1984

DIVISION OF OIL & GAS
COALINGA

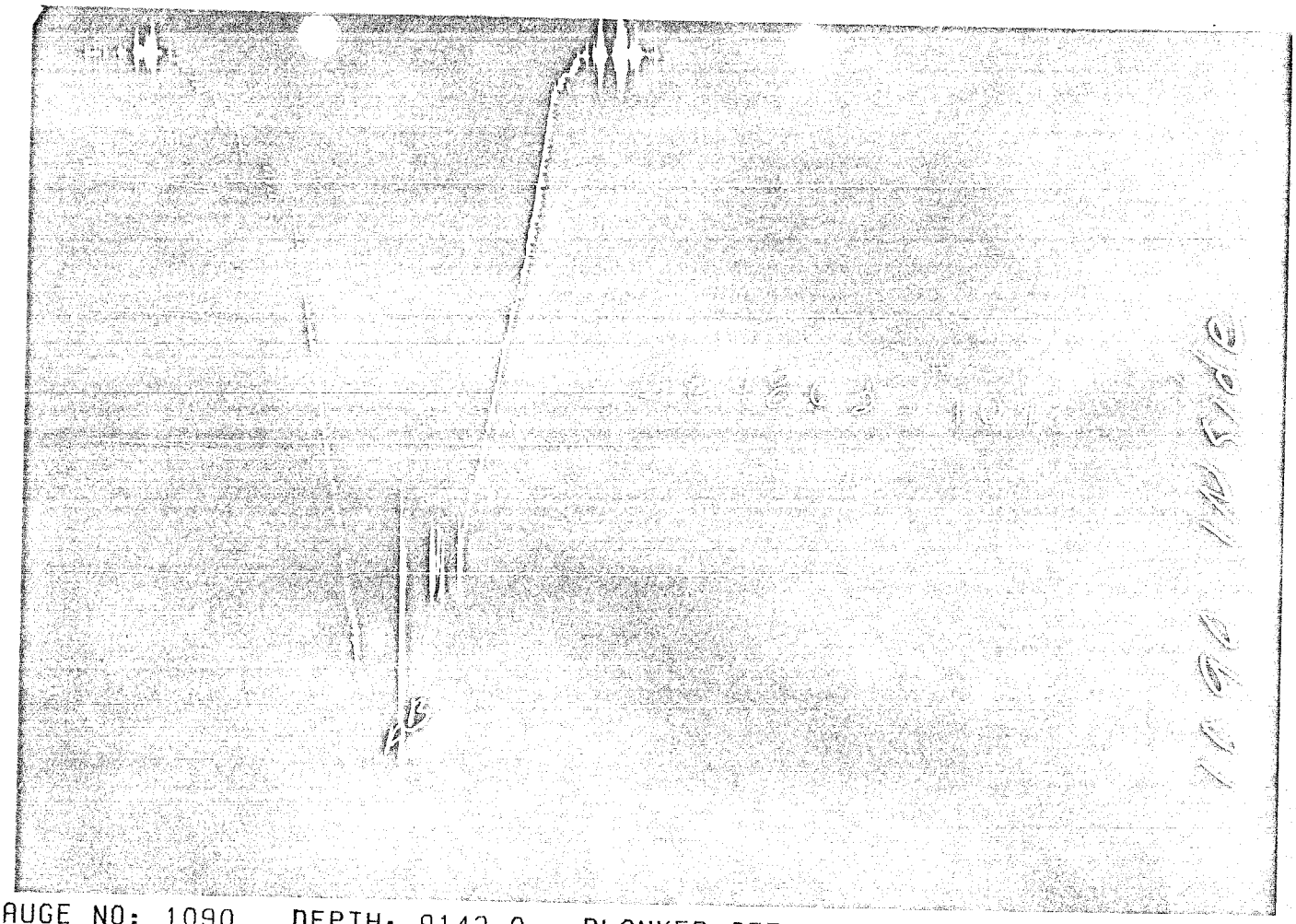
FORMATION TESTING SERVICE REPORT

LEASE NAME	SAUZC
WELL NO.	1
TEST NO.	5
TESTED INTERVAL	9160.' - 9200.'
LEASE OWNER/COMPANY NAME	AMERICAN HUNTER EXPLORATION,LIMITED
LEGAL LOCATION SEC. - TWP. - RNG.	36 - 14S - 12E -
FIELD AREA	CHANNEY RANCH
COUNTY	FRESNO
STATE	CALIFORNIA NM



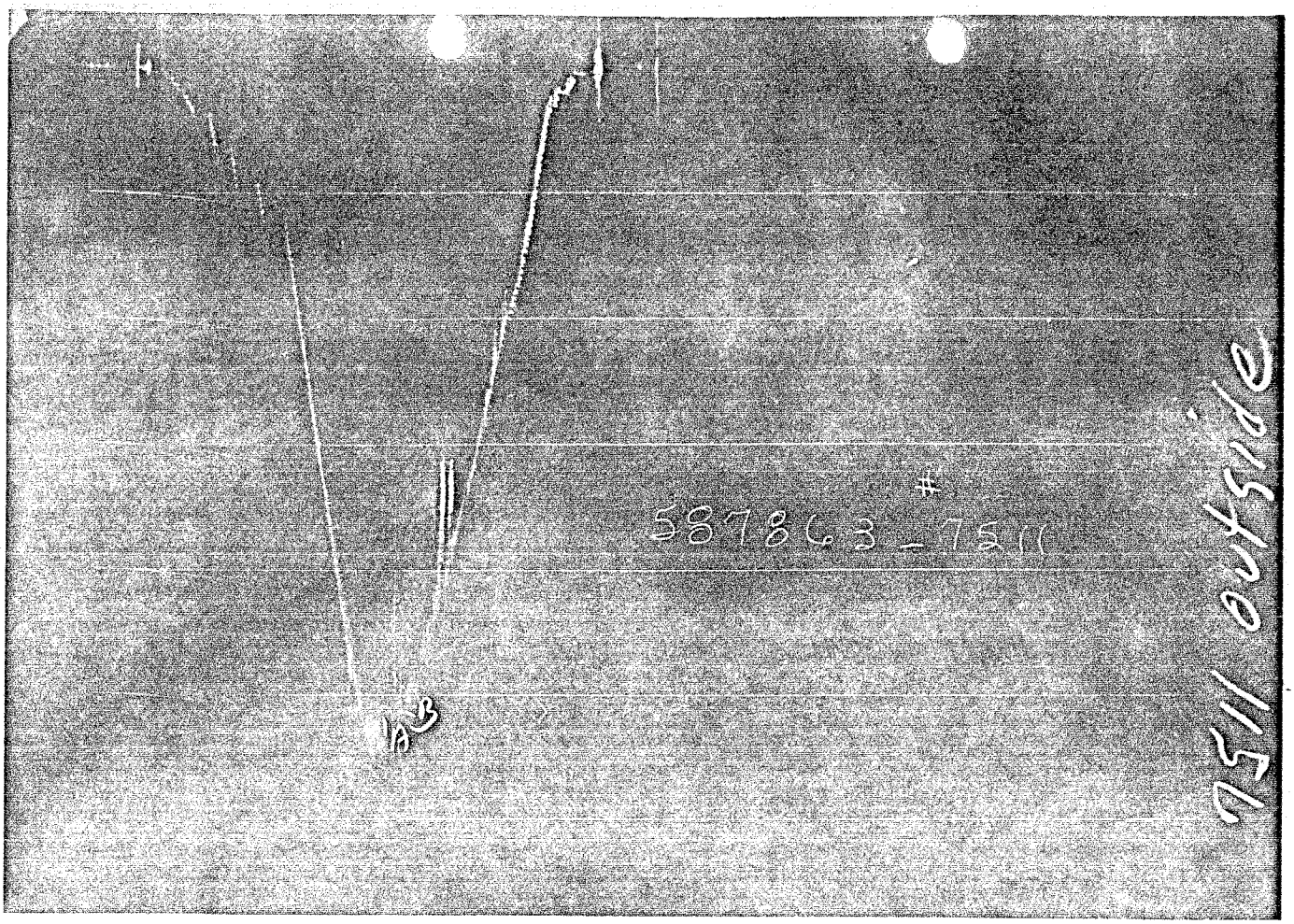
GAUGE NO: 7512 DEPTH: 9126.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	FINAL HYDROSTATIC					



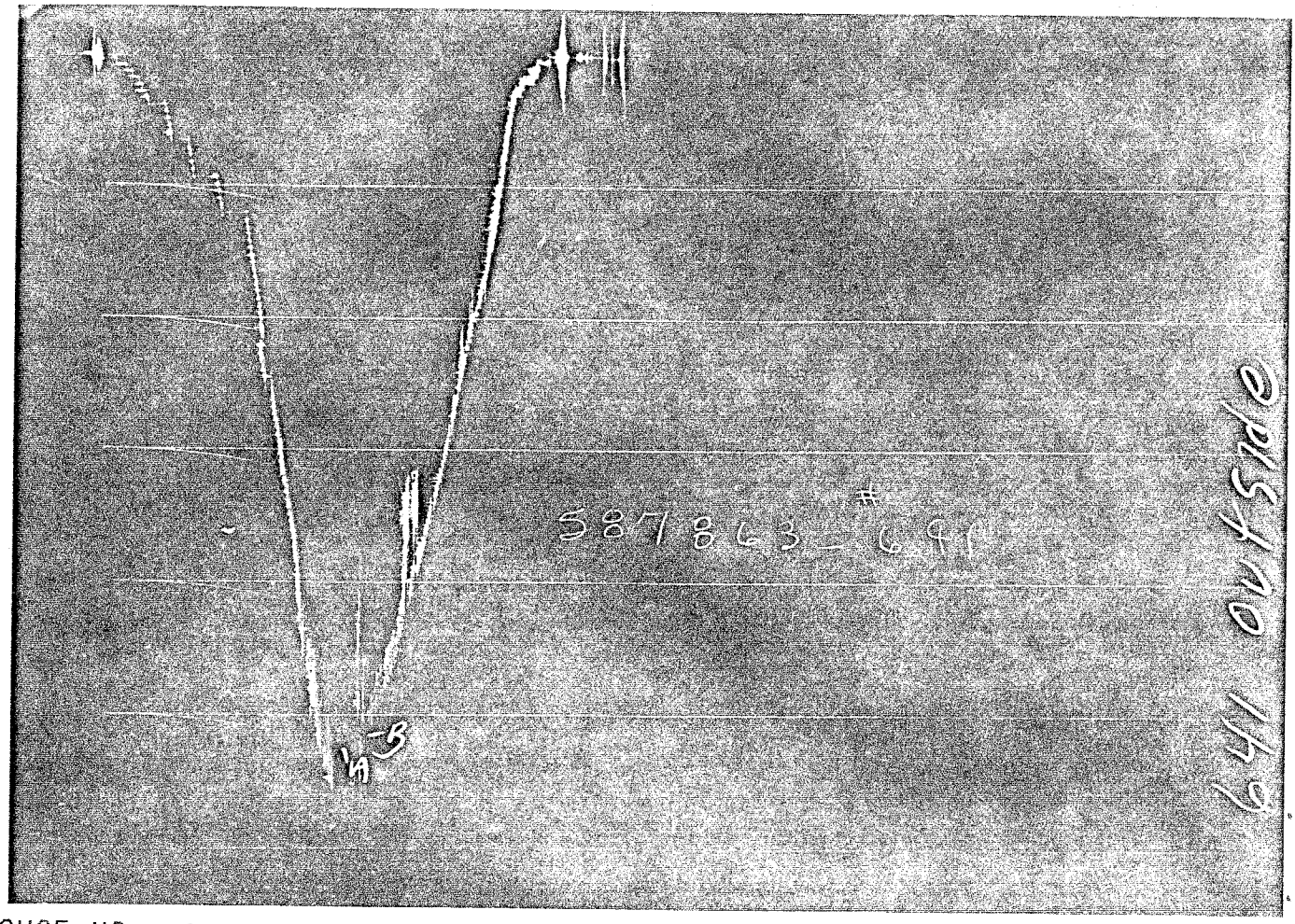
GAUGE NO: 1090 DEPTH: 9142.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5272	5130.7			
B	FINAL HYDROSTATIC	5198	5086.6			



GAUGE NO: 7511 DEPTH: 9192.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5260	5166.5			
B	FINAL HYDROSTATIC	5182	5132.1			



GAUGE NO: 641 DEPTH: 9196.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5287	5179.7			
B	FINAL HYDROSTATIC	5213	5159.4			

EQUIPMENT & HOLE DATA

FORMATION TESTED: _____
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 40.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 8.750
ELEVATION (ft): 0
TOTAL DEPTH (ft): 9200.0
PACKER DEPTH(S) (ft): 9154, 9160
FINAL SURFACE CHOKE (in): _____
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 10.50
MUD VISCOSITY (sec): 46
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 121 @ 9200.0 ft

TICKET NUMBER: 58786300

DATE: 11-30-83 TEST NO: 5

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: BAKERSFIELD

TESTER: R.D. LYONS

WITNESS: WALT ZURBA

DRILLING CONTRACTOR: MONTGOMERY DRILLING COMPANY

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm

SAMPLER DATA

Psig AT SURFACE: _____
cu.ft. OF GAS: _____
cc OF OIL: _____
cc OF WATER: _____
cc OF MUD: _____
TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ ____°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
WATER (FT)	2000.0	8.33
_____	_____	_____

RECOVERED:

PULLED TO FLUID.... RECOVERED 2000 FEET OF WATER CUSHION AND 523 FEET OF DRILLING MUD

MEASURED FROM TESTER VALVE

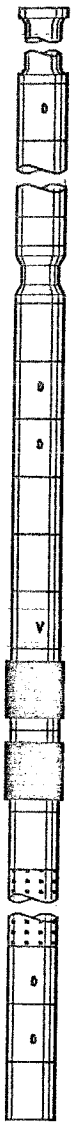
REMARKS:

LOST PACKER SEAT...

TYPE & SIZE MEASURING DEVICE: — TICKET NO: 58786300

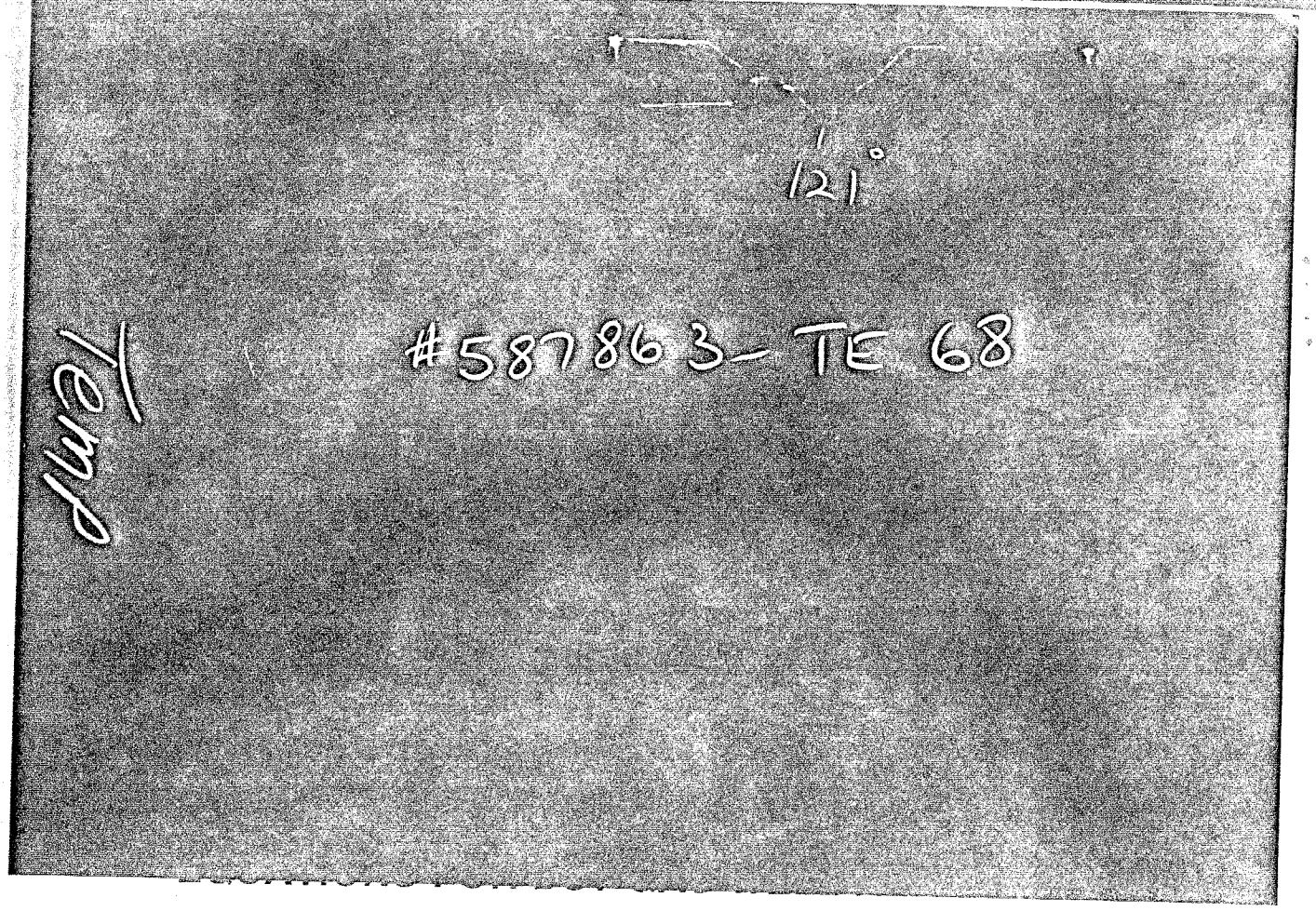
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
11-30-83					
0523					OPENED HYDROSPRING - FLUID
					DROPPED - PULLED LOOSE.
0530					OPENED HYDROSPRING - FLUID
					DROPPED - PULLED LOOSE AND
					CAME OUT OF THE HOLE.. NO
					PACKER SEAT...

TICKET NO. 58786300



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	5.000	4.276	8854.0	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	8838.0
3	DRILL COLLARS.....	6.000	2.750	283.0	
5	CROSSOVER.....	6.000	3.000	0.9	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	2.250	4.6	
80	AP RUNNING CASE.....	5.000	3.000	4.2	9126.0
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	
80	AP RUNNING CASE.....	5.000	3.000	4.2	9142.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9154.0
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9160.0
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.250	4.2	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	21.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.6	9192.0
81	BLANKED-OFF RUNNING CASE.....	5.000		3.9	9196.0
82	TEMPERATURE RUNNING CASE.....	5.000		4.1	9200.0
	TOTAL DEPTH				9200.0

EQUIPMENT DATA



Indicated Flow Capacity	$kh = \frac{1637\ Q_g\ T}{m}$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Skin Factor	$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG}\ \frac{kt}{\phi\ \mu\ c_t r_w^2} + 3.23 \right]$	—
Damage Ratio	$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\ mS}$	—
Indicated Flow Rate (Maximum)	$AOF_1 = \frac{Q_g\ m(P^*)}{m(P^*) - m(P_f)}$	MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$	MCFD
Approx. Radius of Investigation	$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_t}}$	ft

HALLIBURTON

SERVICES

TICKET NO. 58786200

15-DEC-83

BAKERSFIELD

019-21924

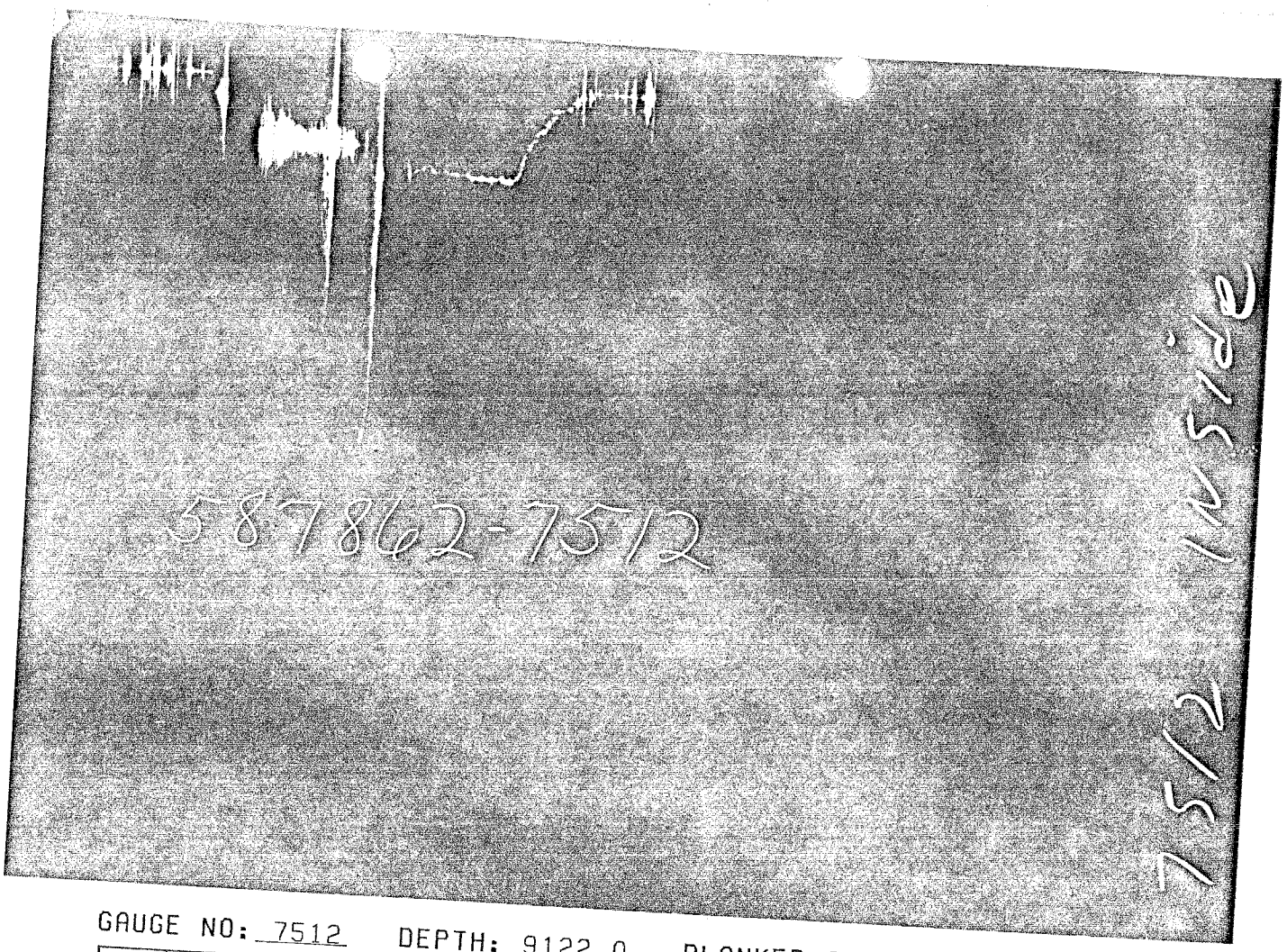
RECEIVED

APR 09 1984

DIVISION OF OIL & GAS
COALINGA

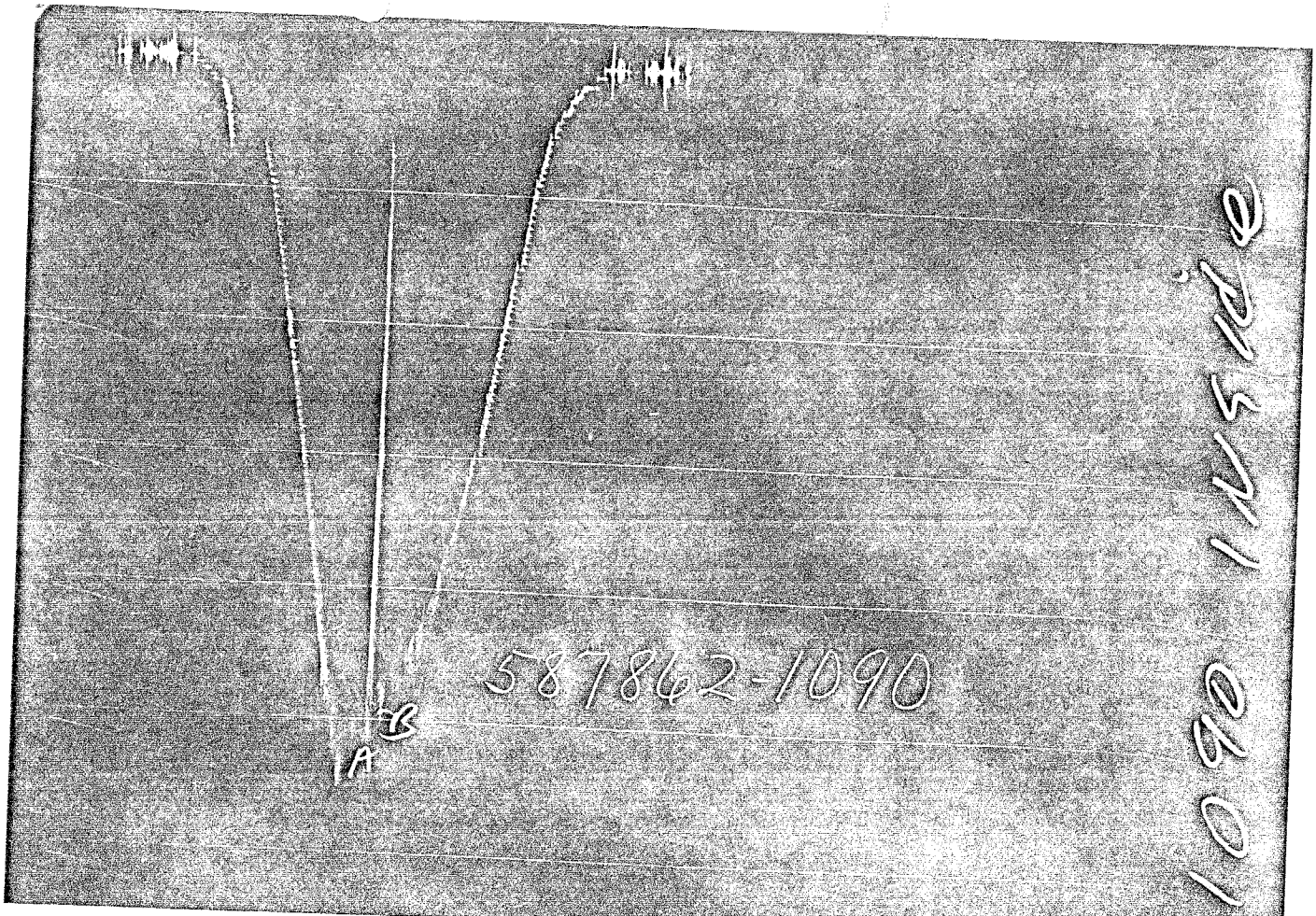
FORMATION TESTING SERVICE REPORT

LEGAL LOCATION SEC. - TWP. - RNG.		FIELD AREA	CHANNEL RANCH	COUNTY	FRESNO
LEASE NAME	SOUZA	WELL NO.	4	TEST NO.	4
TESTED INTERVAL	9158' - 9200'				
LEASE OWNER/COMPANY NAME	AMERADA HUNTER EXPLORATION, LIMITED			STATE	CALIFORNIA BC



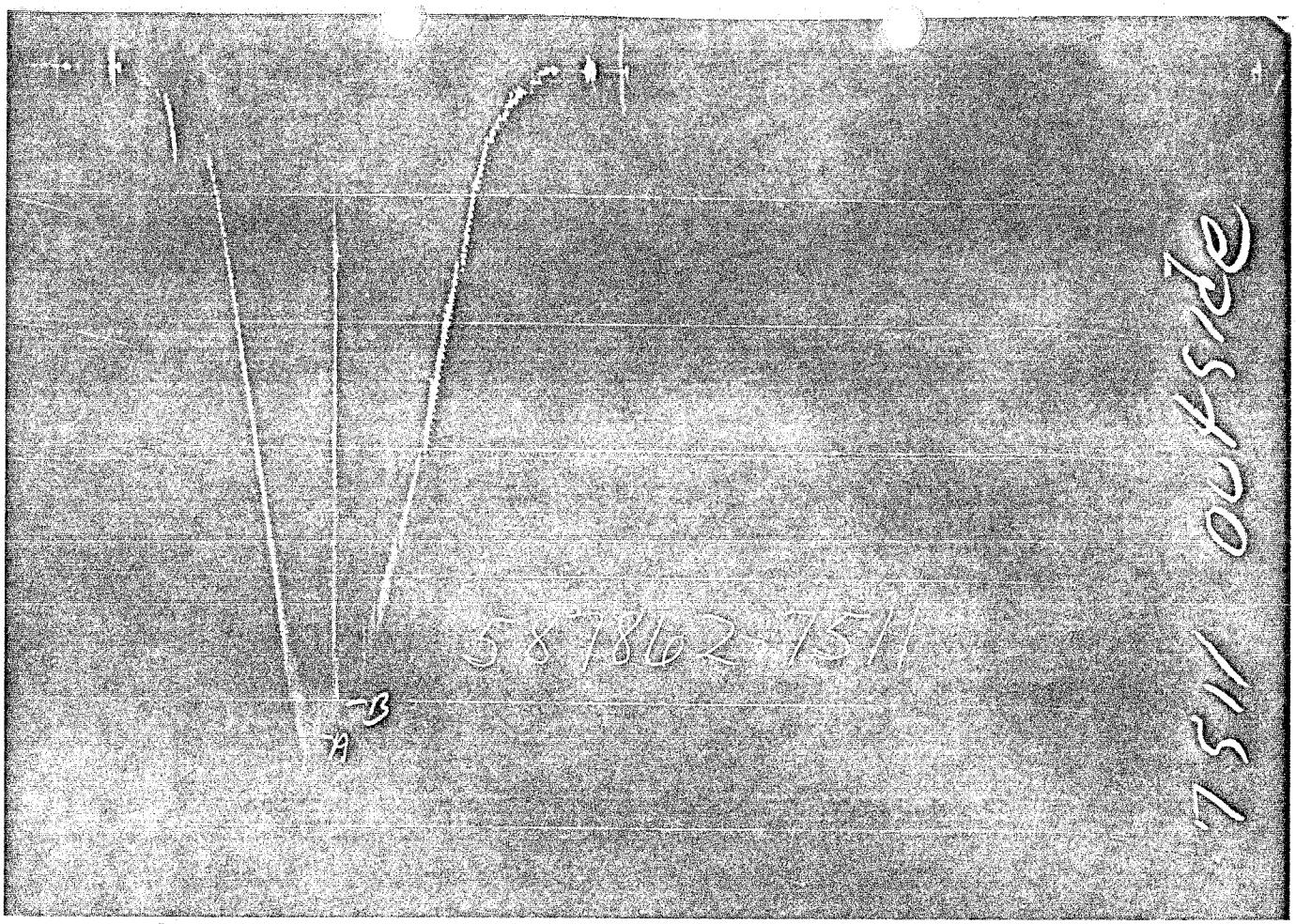
GAUGE NO: 7512 DEPTH: 9122.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	FINAL HYDROSTATIC					



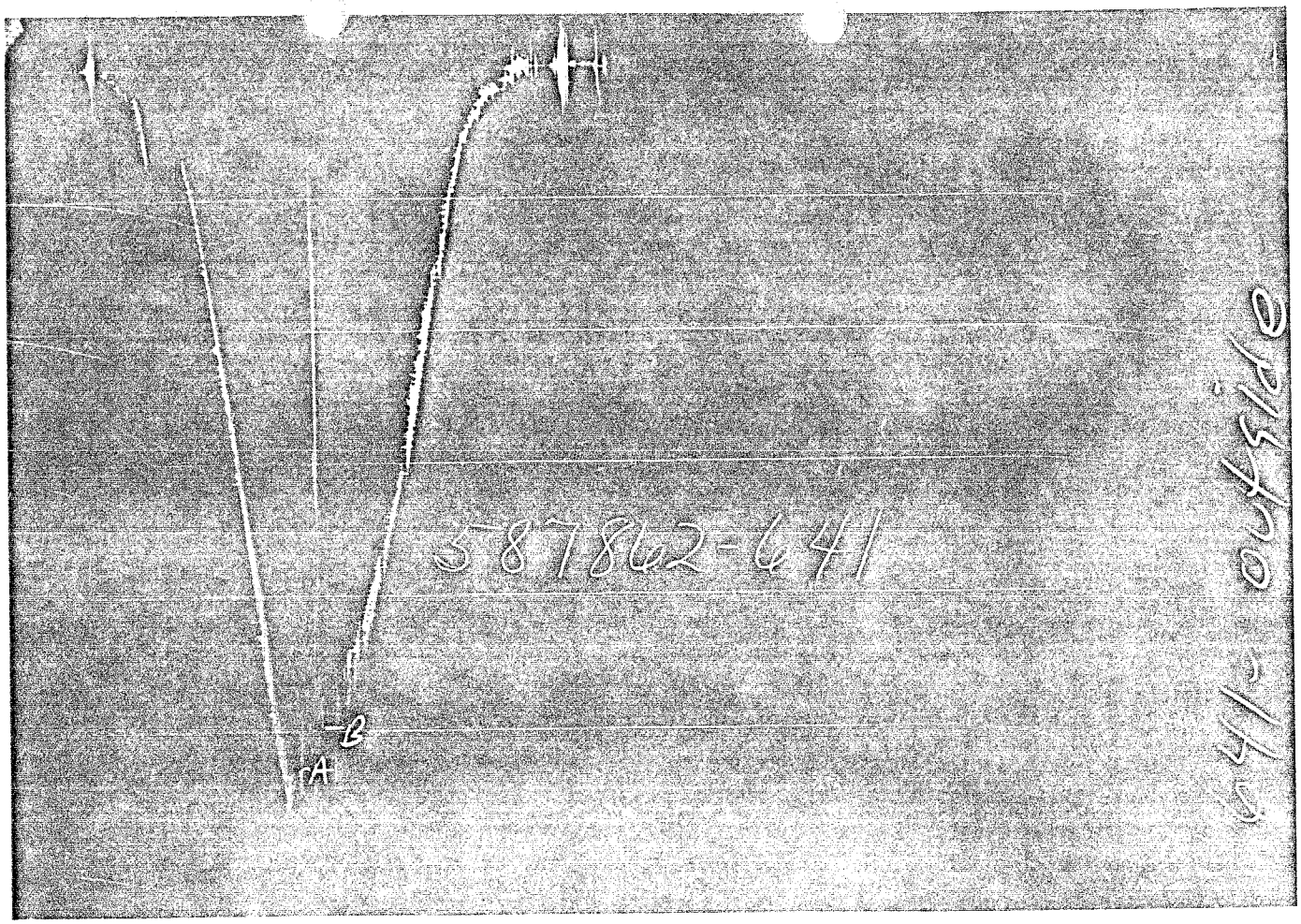
GAUGE NO: 1090 DEPTH: 9138.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		5207.9			
B	FINAL HYDROSTATIC		4877.3			



GAUGE NO: 7511 DEPTH: 9192.0 BLANKED OFF: YES HOUR OF CLOCK:

ID	DESCRIPTION	PRESSURE		TIME		TYP
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5299	5268.1			
B	FINAL HYDROSTATIC	4947	4939.3			



GAUGE NO: 641 DEPTH: 9196.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	5287	5280.4			
B	FINAL HYDROSTATIC	4994	4956.3			

EQUIPMENT & HOLE DATA

FORMATION TESTED: _____
NET PAY (ft): _____
GROSS TESTED FOOTAGE: _____
ALL DEPTHS MEASURED FROM: _____
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): _____
ELEVATION (ft): _____
TOTAL DEPTH (ft): _____
PACKER DEPTH(S) (ft): 9150, 9156
FINAL SURFACE CHOKE (in): _____
BOTTOM HOLE CHOKE (in): _____
MUD WEIGHT (lb/gal): _____
MUD VISCOSITY (sec): _____
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 212 @ 9200.0 ft

TICKET NUMBER: 58786200

DATE: 11-29-83 TEST NO: 4

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: BAKERSFIELD

TESTER: LYONS

WITNESS: ZURBA

DRILLING CONTRACTOR: MONTGOMERY DRILLING COMPANY

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm

SAMPLER DATA

Psig AT SURFACE: _____
cu.ft. OF GAS: _____
cc OF OIL: _____
cc OF WATER: _____
cc OF MUD: _____
TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ ____°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
WATER (FT.)	1188.0	8.33

RECOVERED:

523' OF HOLE FLUID AND MUD

MEASURED FROM TESTER VALVE

REMARKS:

LOST PACKER SEAT.

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 58786200

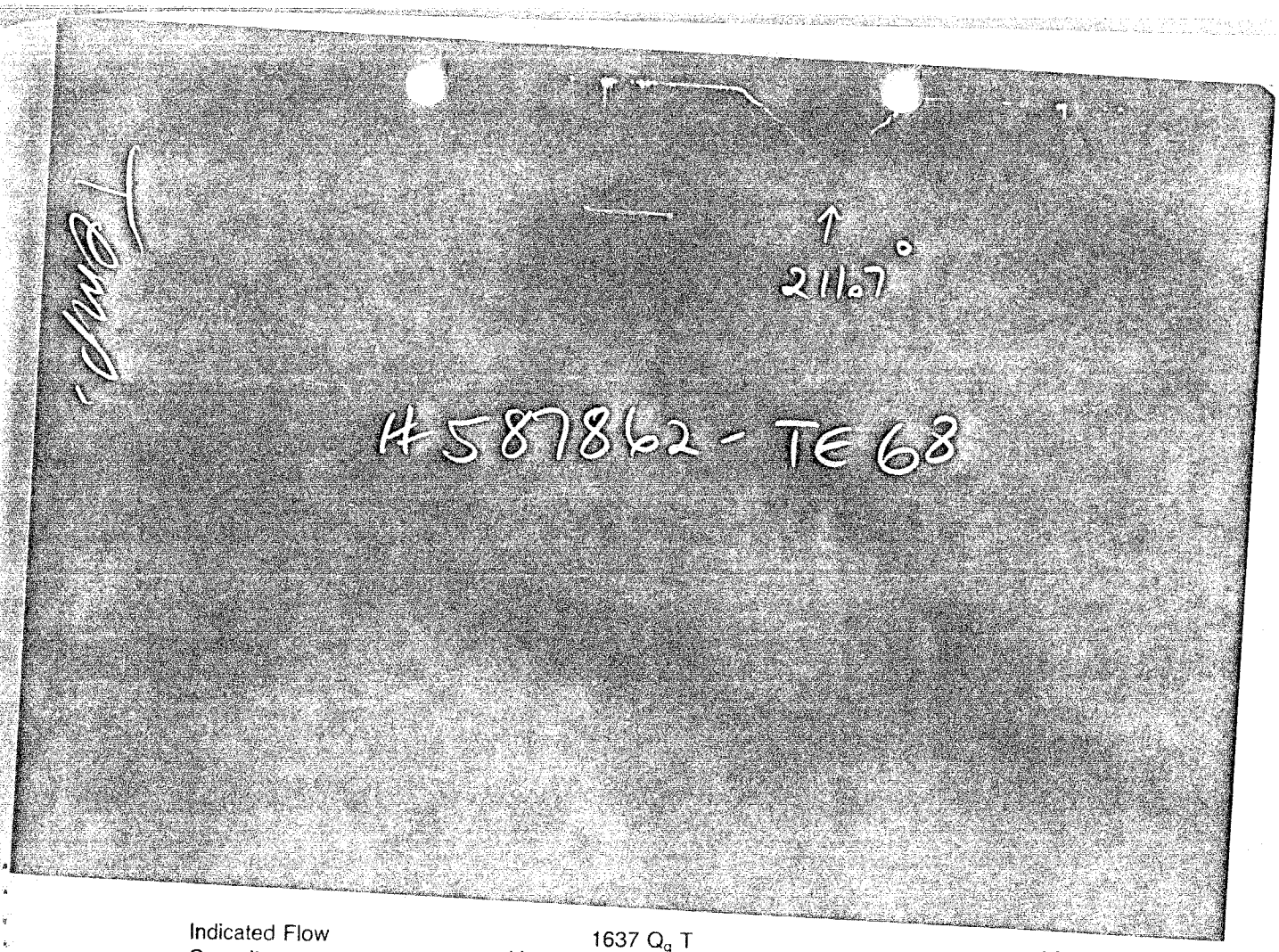
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
11-29-83					
0217					OPENED HYDROSPRING WITH A LIGHT
					BLOW
0219					PACKER SEAT GAVE AWAY
0220					PULLED LOOSE.

TICKET NO. 58786200

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	5.000	4.276	8854.0	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	8834.0
3	DRILL COLLARS.....	6.000	2.750	283.0	
5	CROSSOVER.....	6.000	3.000	0.9	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	2.250	4.6	
80	AP RUNNING CASE.....	5.000	3.000	4.2	9122.0
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	
80	AP RUNNING CASE.....	5.000	3.000	4.2	9138.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9150.0
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	9156.0
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.250	4.2	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	25.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.6	9192.0
81	BLANKED-OFF RUNNING CASE.....	5.000		3.9	9196.0
82	TEMPERATURE RUNNING CASE.....	5.000		4.1	9200.0

TOTAL DEPTH 9200.0

EQUIPMENT DATA



Indicated Flow Capacity	$kh = \frac{1637\ Q_g\ T}{m}$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Skin Factor	$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi\ \mu\ c_t r_w^2} + 3.23 \right]$	—
Damage Ratio	$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\ mS}$	—
Indicated Flow Rate (Maximum)	$AOF_1 = \frac{Q_g\ m(P^*)}{m(P^*) - m(P_f)}$	MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$	MCFD
Approx. Radius of Investigation	$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_t}}$	ft

RECEIVED
APR 23 1984
DIVISION OF OIL & GAS
COALINGA

HALLIBURTON
SERVICES

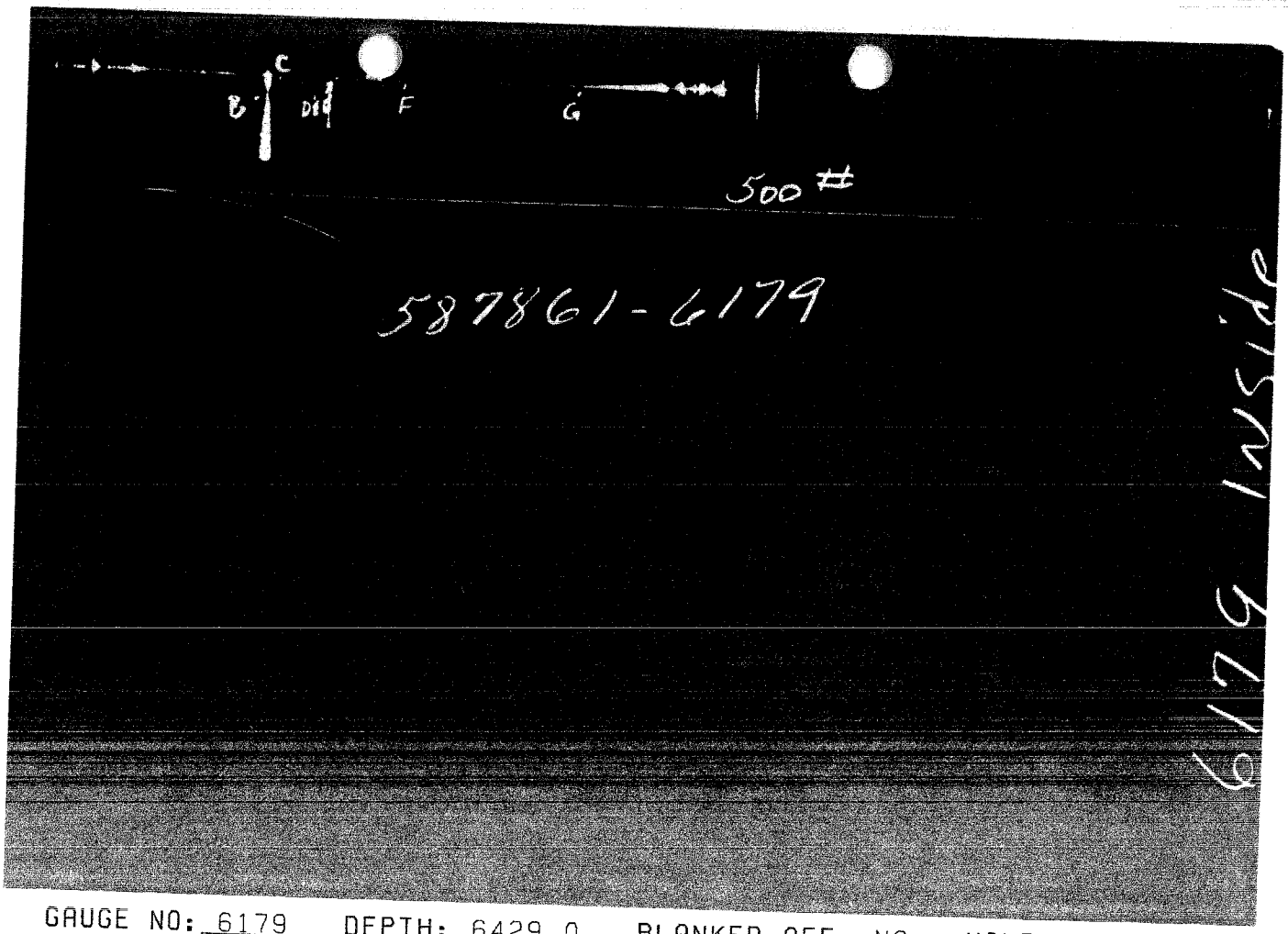
TICKET NO. 58786100
28-NOV-83
BAKERSFIELD

FORMATION TESTING SERVICE REPORT

SOUZA	1	3	6463.' - 6512.'	AMERICAN HUNTER EXPLORATION LIMIED
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME

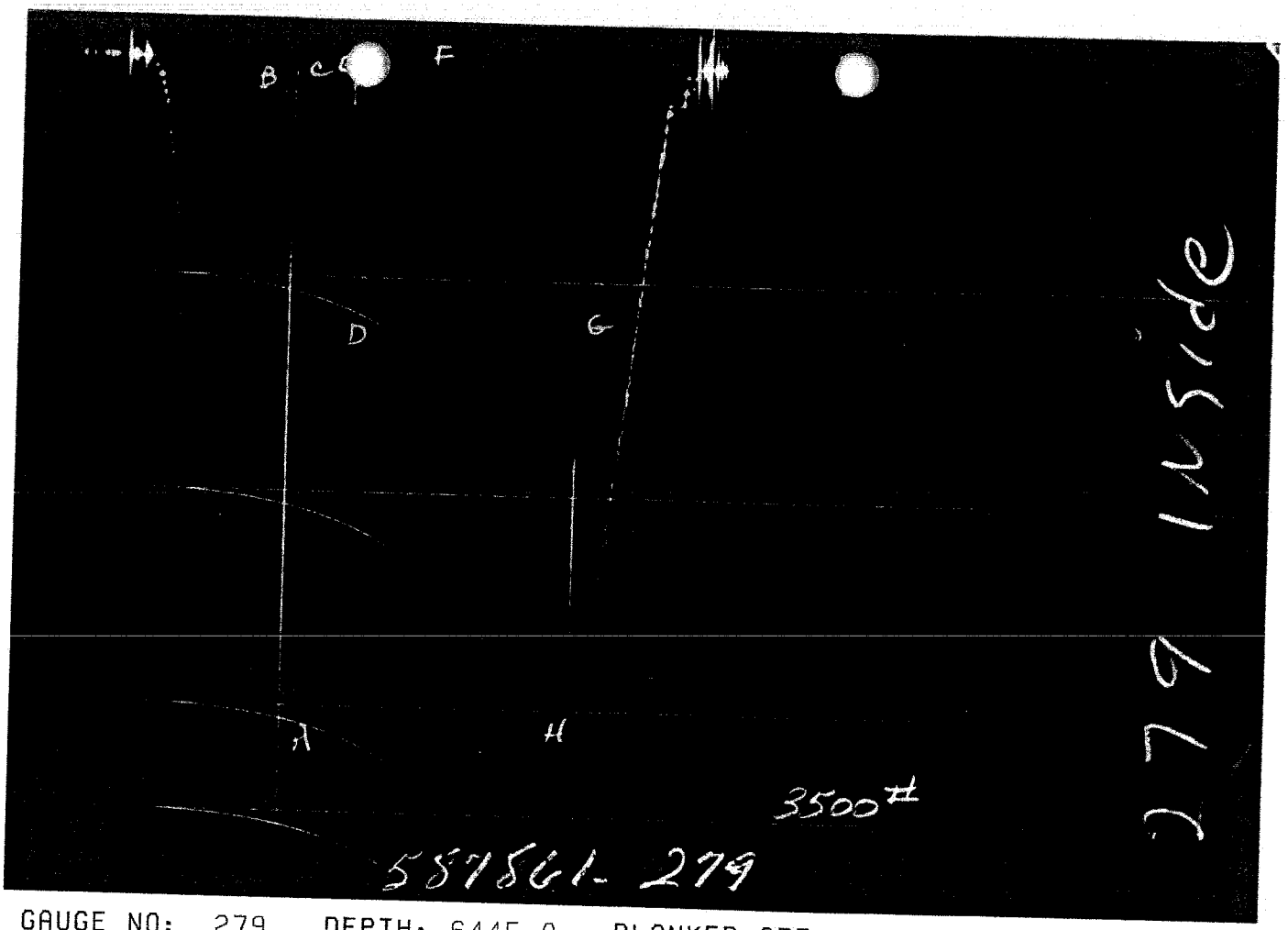
LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
36 - 14/12	CHANNEY RANCH	FRESNO	CALIFORNIA IC

019 - 21924



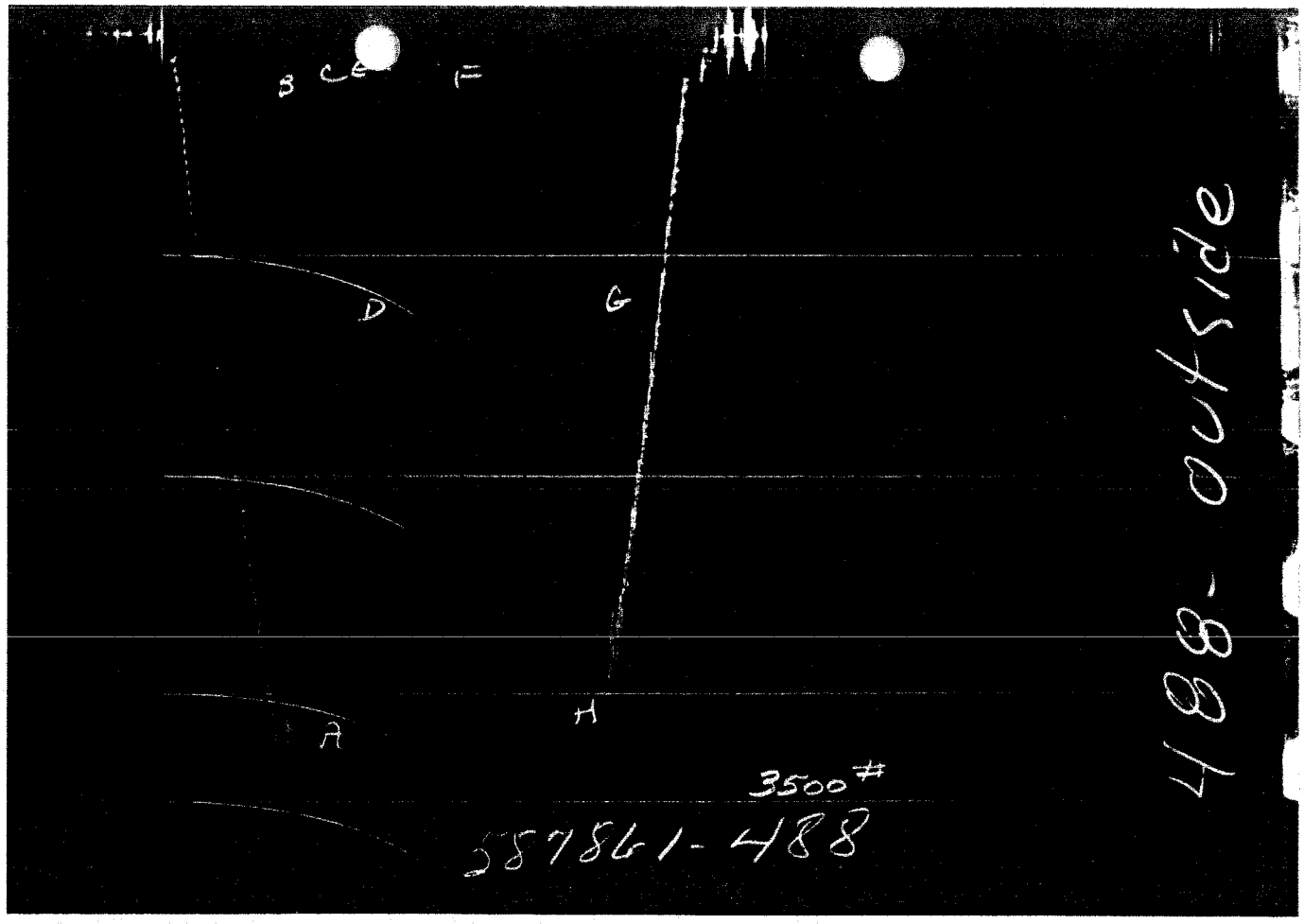
GAUGE NO: 6179 DEPTH: 6429.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW	31	73.6	10.0	9.7	F
C	FINAL FIRST FLOW	31	21.7			
C	INITIAL FIRST CLOSED-IN	31	21.7	61.0	60.2	C
D	FINAL FIRST CLOSED-IN		32.5			
E	INITIAL SECOND FLOW		21.4	91.0	92.9	F
F	FINAL SECOND FLOW		3.6			
F	INITIAL SECOND CLOSED-IN		3.6	187.0	186.2	C
G	FINAL SECOND CLOSED-IN		3.8			
H	FINAL HYDROSTATIC					



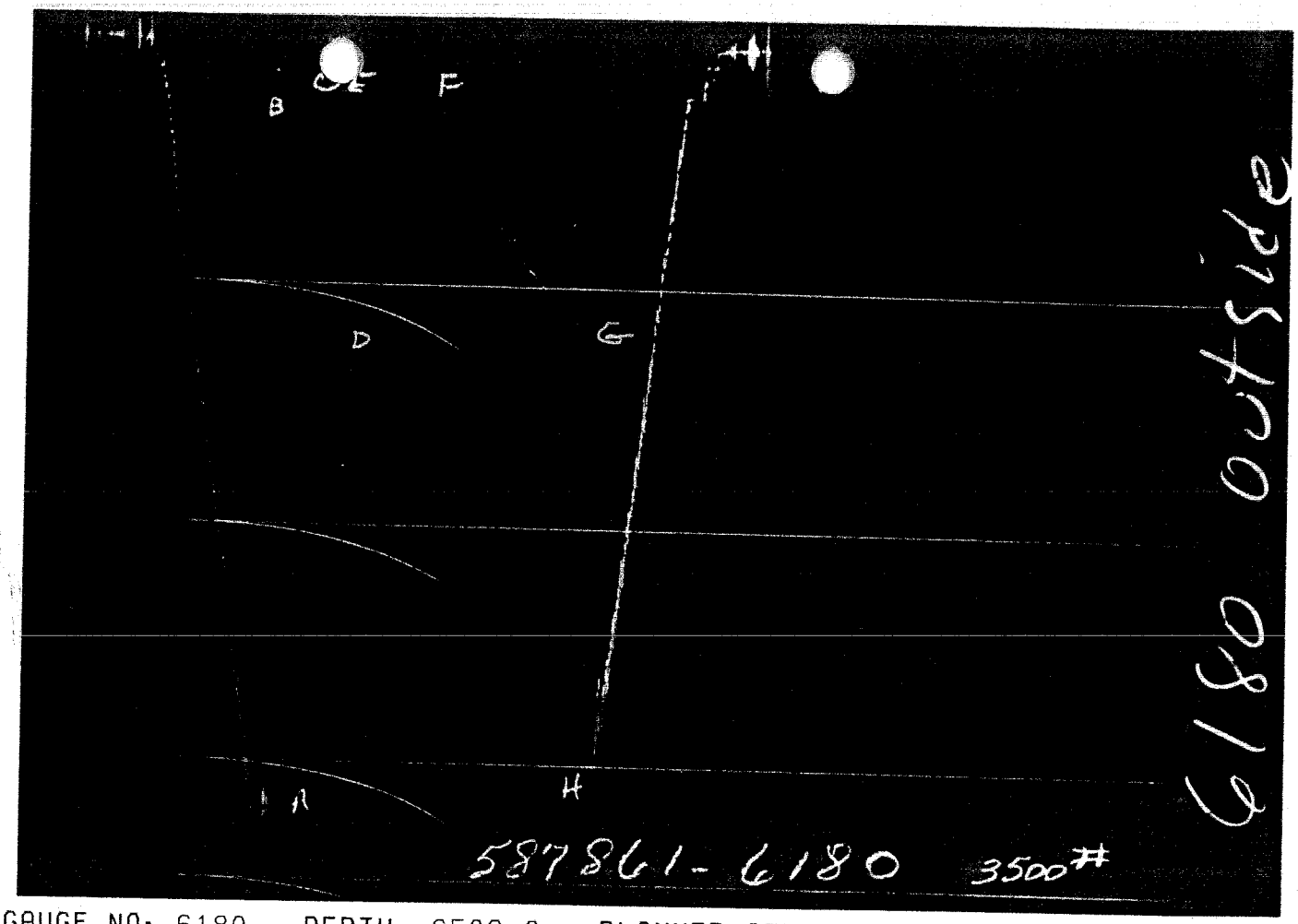
GAUGE NO: 279 DEPTH: 6445.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3183	3142.4			
B	INITIAL FIRST FLOW	66	67.1	10.0	9.7	F
C	FINAL FIRST FLOW	55	36.7			
C	INITIAL FIRST CLOSED-IN	55	36.7	61.0	60.2	C
D	FINAL FIRST CLOSED-IN	1195	1185.1			
E	INITIAL SECOND FLOW	22	39.1	91.0	92.9	F
F	FINAL SECOND FLOW	22	10.3			
F	INITIAL SECOND CLOSED-IN	22	10.3	187.0	186.2	C
G	FINAL SECOND CLOSED-IN	1195	1205.9			
H	FINAL HYDROSTATIC	3183	3042.0			



GAUGE NO: 488 DEPTH: 6504.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3167	3177.4			
B	INITIAL FIRST FLOW	207	264.4	10.0	9.7	F
C	FINAL FIRST FLOW	207	229.9			
C	INITIAL FIRST CLOSED-IN	207	229.9	61.0	60.2	C
D	FINAL FIRST CLOSED-IN	1195	1194.6			
E	INITIAL SECOND FLOW	218	242.2	91.0	92.9	F
F	FINAL SECOND FLOW	286	271.3			
F	INITIAL SECOND CLOSED-IN	286	271.3	187.0	186.2	C
G	FINAL SECOND CLOSED-IN	1195	1212.4			
H	FINAL HYDROSTATIC	3167	3056.4			



GAUGE NO: 6180 DEPTH: 6508.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3193	3179.3			
B	INITIAL FIRST FLOW	250	276.6	10.0	9.7	F
C	FINAL FIRST FLOW	229	236.6			
C	INITIAL FIRST CLOSED-IN	229	236.6	61.0	60.2	C
D	FINAL FIRST CLOSED-IN	1169	1183.0			
E	INITIAL SECOND FLOW	229	254.5	91.0	92.9	F
F	FINAL SECOND FLOW	271	283.8			
F	INITIAL SECOND CLOSED-IN	271	283.8	187.0	186.2	C
G	FINAL SECOND CLOSED-IN	1190	1205.6			
H	FINAL HYDROSTATIC	3193	3050.5			

TICKET NO: 58786100	GAUGE NO: 6179
CLOCK NO: 28187 HOUR: 24	DEPTH: 6429.0

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	73.6			
	2	2.0	52.3	-21.3		
	3	4.0	41.6	-10.7		
	4	6.0	37.2	-4.4		
	5	8.0	32.9	-4.3		
C	6	9.7	21.7	-11.3		
			FIRST CLOSED-IN			
C	1	0.0	21.7			
D	2	60.2	32.5	10.9	8.4	0.065
			SECOND FLOW			
E	1	0.0	21.4			
	2	10.0	5.0	-16.4		
	3	20.0	4.4	-0.6		
	4	30.0	4.0	-0.4		
	5	40.0	4.0	0.0		
	6	50.0	4.0	0.0		
	7	60.0	4.0	0.0		
	8	70.0	4.0	0.0		
	9	80.0	4.1	0.1		
F	10	92.9	3.6	-0.5		
			SECOND CLOSED-IN			
F	1	0.0	3.6			
G	2	186.2	3.8	0.2	66.1	0.191

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:
THIS GAUGE WAS RUN ABOVE
THE TOOL.

TICKET NO: 58786100

CLOCK NO: 28235 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 279

DEPTH: 6445.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		FIRST FLOW				
B	1	0.0	67.1			
	2	2.0	67.6	0.6		
	3	4.0	54.0	-13.6		
	4	6.0	46.9	-7.1		
	5	8.0	42.0	-4.9		
C	6	9.7	36.7	-5.3		
		FIRST CLOSED-IN				
C	1	0.0	36.7			
	2	5.0	467.4	430.7	3.3	0.467
	3	10.0	639.2	602.5	4.9	0.294
	4	15.0	752.1	715.4	5.9	0.216
	5	20.0	834.0	797.3	6.5	0.172
	6	25.0	897.4	860.7	7.0	0.143
	7	30.0	954.1	917.4	7.3	0.122
	8	35.0	1001.2	964.5	7.6	0.106
	9	40.0	1043.2	1006.5	7.8	0.094
	10	45.0	1084.0	1047.3	8.0	0.085
	11	50.0	1120.2	1083.5	8.1	0.077
	12	55.0	1152.4	1115.7	8.3	0.071
D	13	60.2	1185.1	1148.4	8.4	0.065
		SECOND FLOW				
E	1	0.0	39.1			
	2	10.0	11.6	-27.5		
	3	20.0	11.1	-0.6		
	4	30.0	9.9	-1.2		
	5	40.0	9.9	0.0		
	6	50.0	9.9	0.0		
	7	60.0	9.5	-0.3		
	8	70.0	9.5	0.0		
	9	80.0	10.0	0.4		
F	10	92.9	10.3	0.3		
		SECOND CLOSED-IN				
F	1	0.0	10.3			
	2	10.0	210.5	200.2	9.1	1.050
	3	20.0	333.8	323.5	16.7	0.787
	4	30.0	433.8	423.5	23.2	0.645
	5	40.0	517.7	507.3	28.8	0.552
	6	50.0	590.1	579.8	33.6	0.485
	7	60.0	658.2	647.9	37.9	0.433
	8	70.0	718.2	707.9	41.6	0.392
	9	80.0	774.3	764.0	44.9	0.358
	10	90.0	827.2	816.8	47.9	0.330
	11	100.0	876.8	866.5	50.6	0.307

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		SECOND CLOSED-IN - CONTINUED				
	12	110.0	922.7	912.4	53.1	0.286
	13	120.0	966.9	956.6	55.3	0.268
	14	130.0	1007.7	997.4	57.3	0.253
	15	140.0	1046.4	1036.1	59.2	0.239
	16	150.0	1084.0	1073.7	60.9	0.226
	17	160.0	1121.4	1111.1	62.5	0.215
	18	170.0	1154.6	1144.2	64.0	0.205
	19	180.0	1187.7	1177.4	65.4	0.196
G	20	186.2	1205.9	1195.6	66.1	0.191

REMARKS:

TICKET NO: 58786100

CLOCK NO: 26292 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 488

DEPTH: 6504.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		FIRST FLOW				
B	1	0.0	264.4			
	2	2.0	251.5	-12.9		
	3	4.0	236.6	-15.0		
	4	6.0	231.2	-5.3		
	5	8.0	228.5	-2.7		
C	6	9.7	229.9	1.4		
		FIRST CLOSED-IN				
C	1	0.0	229.9			
	2	5.0	501.5	271.6	3.3	0.467
	3	10.0	652.8	422.9	4.9	0.295
	4	15.0	755.3	525.4	5.9	0.216
	5	20.0	835.5	605.6	6.5	0.172
	6	25.0	895.1	665.2	7.0	0.142
	7	30.0	953.6	723.7	7.3	0.122
	8	35.0	998.7	768.8	7.6	0.106
	9	40.0	1049.7	819.8	7.8	0.094
	10	45.0	1092.7	862.8	8.0	0.085
	11	50.0	1129.7	899.8	8.1	0.077
	12	55.0	1162.9	933.0	8.3	0.071
D	13	60.2	1194.6	964.7	8.4	0.065
		SECOND FLOW				
E	1	0.0	242.2			
	2	10.0	242.2	0.0		
	3	20.0	251.7	9.5		
	4	30.0	258.2	6.4		
	5	40.0	259.1	0.9		
	6	50.0	266.5	7.4		
	7	60.0	268.2	1.7		
	8	70.0	269.9	1.6		
	9	80.0	274.0	4.1		
F	10	92.9	271.3	-2.7		
		SECOND CLOSED-IN				
F	1	0.0	271.3			
	2	10.0	284.0	12.7	9.1	1.052
	3	20.0	328.3	57.0	16.7	0.787
	4	30.0	415.0	143.7	23.2	0.645
	5	40.0	497.9	226.6	28.8	0.552
	6	50.0	569.3	298.0	33.6	0.485
	7	60.0	640.9	369.6	37.8	0.433
	8	70.0	706.5	435.2	41.6	0.392
	9	80.0	767.6	496.4	45.0	0.358
	10	90.0	825.1	553.8	47.9	0.330
	11	100.0	877.2	605.9	50.6	0.307

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		SECOND CLOSED-IN - CONTINUED				
	12	110.0	921.6	650.4	53.1	0.286
	13	120.0	965.9	694.6	55.3	0.268
	14	130.0	1008.2	737.0	57.3	0.253
	15	140.0	1046.3	775.0	59.2	0.239
	16	150.0	1085.5	814.2	60.9	0.226
	17	160.0	1121.7	850.4	62.5	0.215
	18	170.0	1156.3	885.0	64.0	0.205
	19	180.0	1192.1	920.8	65.3	0.196
G	20	186.2	1212.4	941.1	66.1	0.191

REMARKS:

TICKET NO: 58786100

CLOCK NO: 13680 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 6180

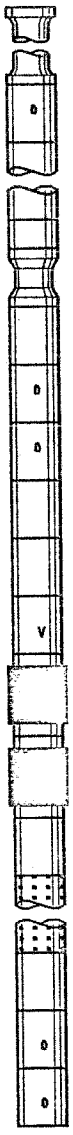
DEPTH: 6508.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	276.6			
	2	2.0	259.3	-17.3		
	3	4.0	246.2	-13.0		
	4	6.0	240.2	-6.1		
	5	8.0	235.9	-4.3		
C	6	9.7	236.6	0.7		
			FIRST CLOSED-IN			
C	1	0.0	236.6			
	2	5.0	512.1	275.5	3.3	0.468
	3	10.0	652.2	415.6	4.9	0.296
	4	15.0	750.1	513.5	5.9	0.217
	5	20.0	823.5	586.8	6.5	0.172
	6	25.0	887.2	650.5	7.0	0.143
	7	30.0	940.3	703.7	7.3	0.122
	8	35.0	988.4	751.8	7.6	0.106
	9	40.0	1037.0	800.3	7.8	0.094
	10	45.0	1078.8	842.2	8.0	0.085
	11	50.0	1116.7	880.1	8.1	0.077
	12	55.0	1150.1	913.5	8.3	0.071
D	13	60.2	1183.0	946.3	8.4	0.065
			SECOND FLOW			
E	1	0.0	254.5			
	2	10.0	253.4	-1.0		
	3	20.0	261.9	8.5		
	4	30.0	267.7	5.8		
	5	40.0	269.8	2.1		
	6	50.0	277.5	7.6		
	7	60.0	278.2	0.7		
	8	70.0	281.6	3.4		
	9	80.0	285.4	3.8		
F	10	92.9	283.8	-1.6		
			SECOND CLOSED-IN			
F	1	0.0	283.8			
	2	10.0	296.9	13.0	9.1	1.051
	3	20.0	338.8	55.0	16.7	0.788
	4	30.0	425.4	141.5	23.2	0.646
	5	40.0	507.7	223.9	28.8	0.552
	6	50.0	583.8	300.0	33.6	0.484
	7	60.0	652.1	368.3	37.9	0.433
	8	70.0	713.8	430.0	41.6	0.392
	9	80.0	772.7	488.8	44.9	0.358
	10	90.0	826.0	542.2	47.9	0.330
	11	100.0	877.1	593.3	50.6	0.307

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	12	110.0	924.4	640.6	53.1	0.286
	13	120.0	967.5	683.7	55.3	0.268
	14	130.0	1010.1	726.3	57.3	0.253
	15	140.0	1048.0	764.2	59.2	0.239
	16	150.0	1085.1	801.3	60.9	0.226
	17	160.0	1120.4	836.5	62.5	0.215
	18	170.0	1154.9	871.1	64.0	0.205
	19	180.0	1187.1	903.2	65.3	0.196
G	20	186.2	1205.6	921.8	66.1	0.191

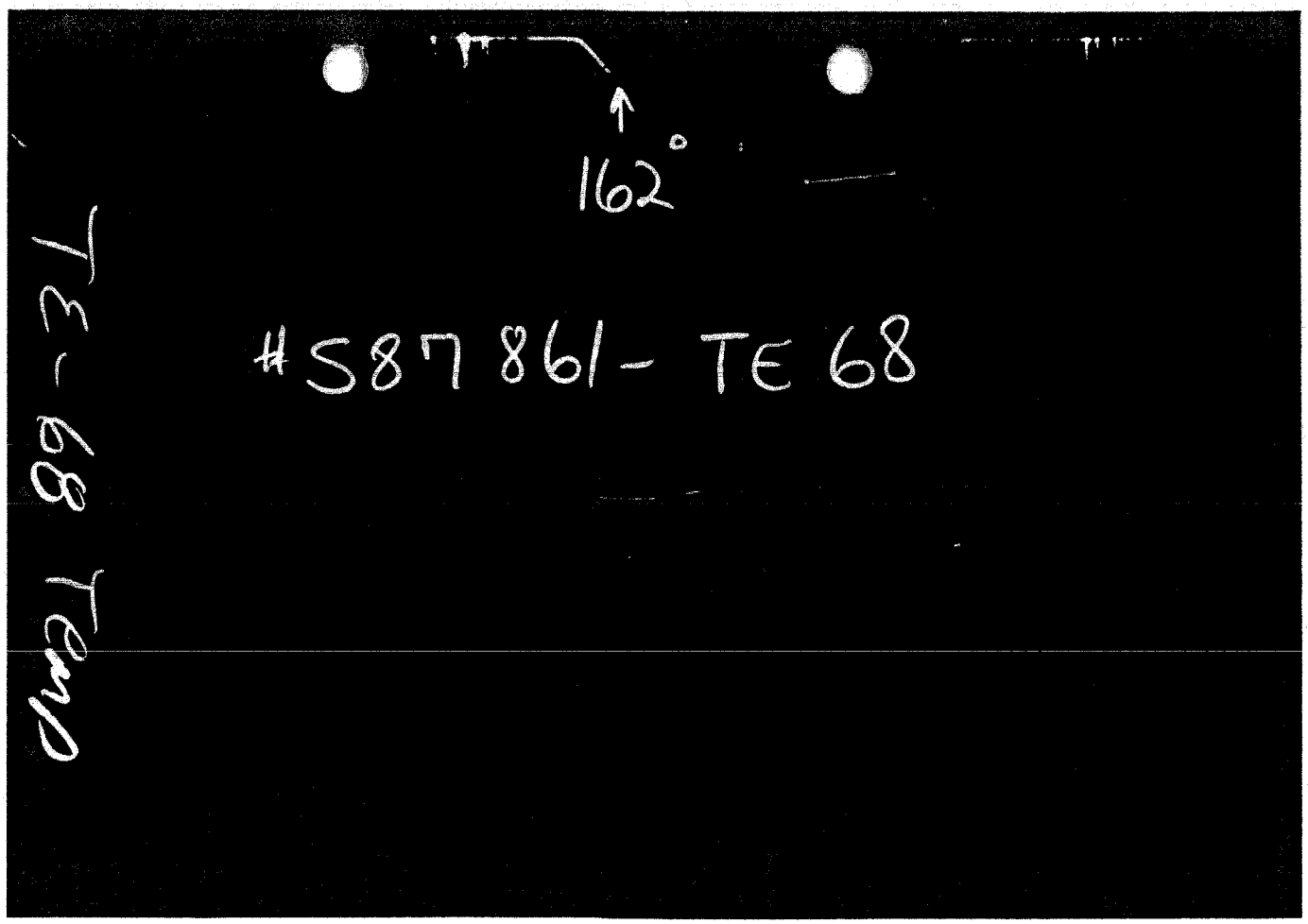
REMARKS:

TICKET NO. 58786100



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	5.000	4.270	6250.0	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	6238.0
3	DRILL COLLARS.....	6.000	3.000	180.0	
5	CROSSOVER.....	6.000	3.000	0.9	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	2.250	4.6	
97	RECORDER ABOVE DCIP VALVE.....	5.000	3.000	4.2	6429.0
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	
80	AP RUNNING CASE.....	5.000	3.000	4.2	6445.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	6457.0
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	6463.0
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.250	4.2	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	30.0	
82	TEMPERATURE RUNNING CASE.....	5.000	2.440	4.6	6500.0
81	BLANKED-OFF RUNNING CASE.....	5.000		3.9	6504.0
81	BLANKED-OFF RUNNING CASE.....	5.000		4.1	6508.0
	TOTAL DEPTH				6512.0

EQUIPMENT DATA



Indicated Flow Capacity	$kh = \frac{1637\ Q_g\ T}{m}$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Skin Factor	$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi\ \mu\ c_t r_w^2} + 3.23 \right]$	—
Damage Ratio	$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\ mS}$	—
Indicated Flow Rate (Maximum)	$AOF_1 = \frac{Q_g\ m(P^*)}{m(P^*) - m(P_f)}$	MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$	MCFD
Approx. Radius of Investigation	$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_t}}$	ft

HALLIBURTON

SERVICES

TICKET NO. 58786000

22-NOV-83

BAKERSFIELD

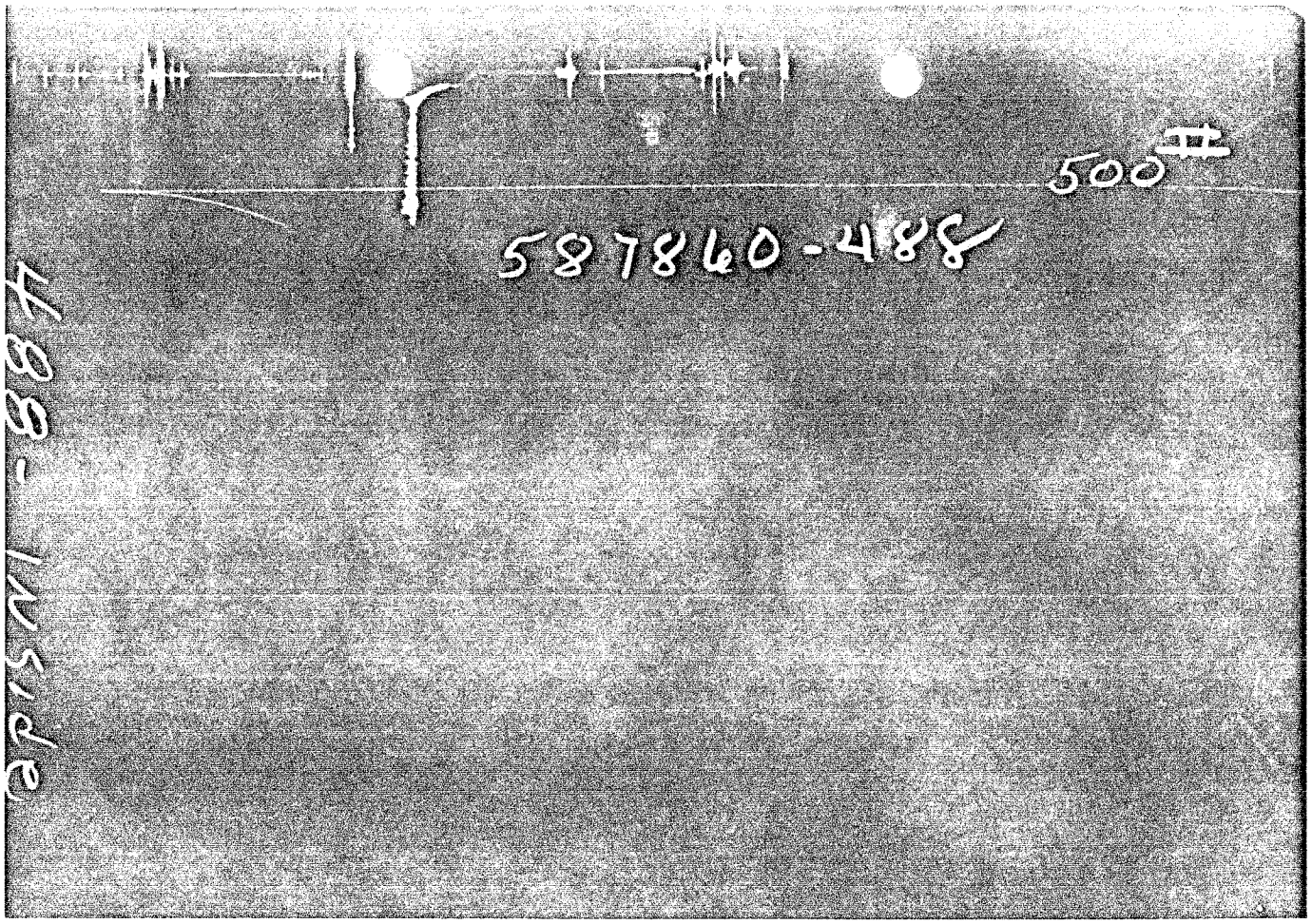
"Souza" 1

019-21924

RECEIVED
APR 09 1984
DIVISION OF OIL & GAS
COALINGA

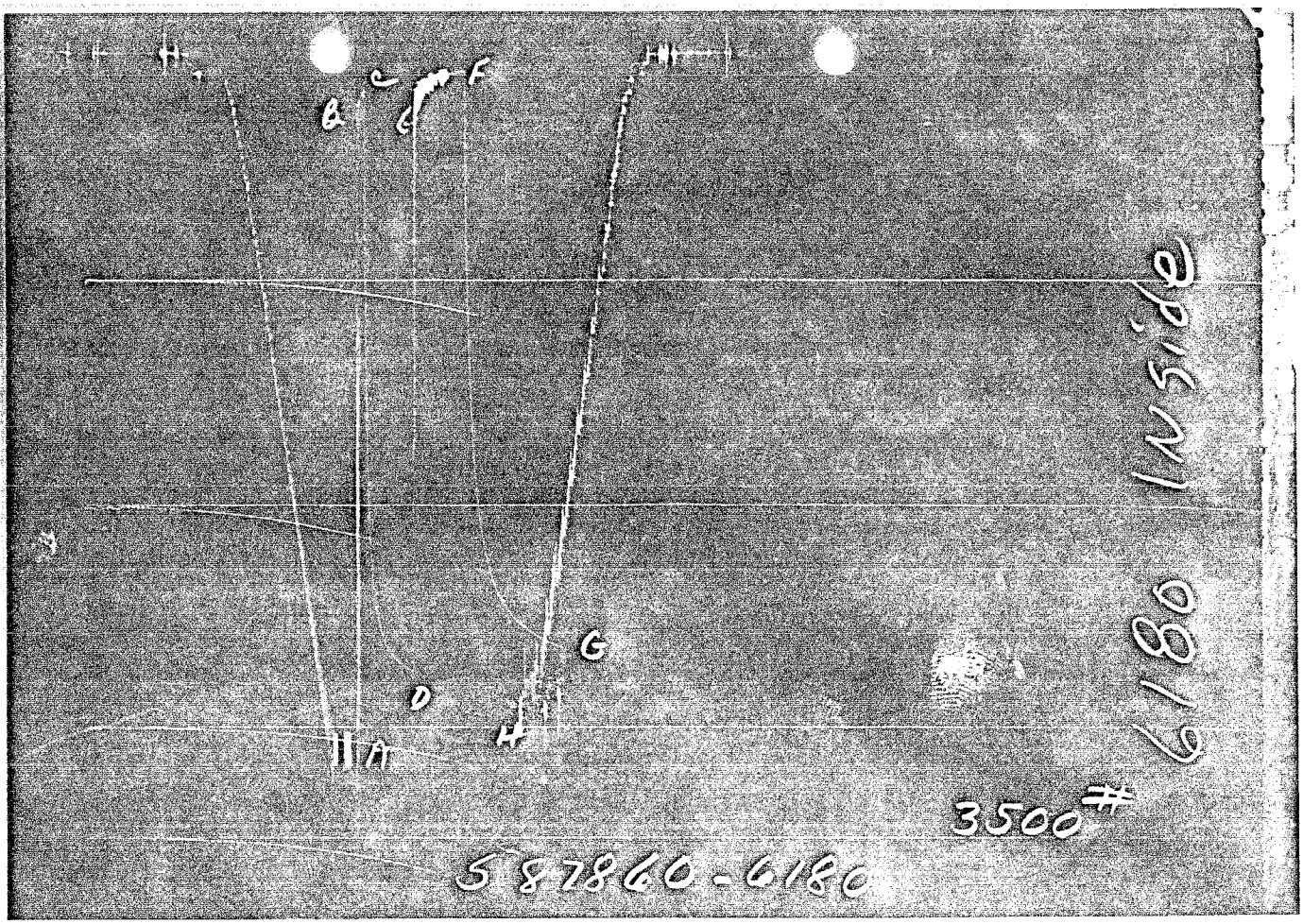
FORMATION TESTING SERVICE REPORT

LEGAL LOCATION SEC. - TWP. - RNG.		WELL NO. 1	TEST NO. 2		LEASE NAME SOUZA
FIELD AREA CHANNEY RANCH	COUNTY FRESNO	STATE CALIFORNIA OR	TESTED INTERVAL 6308. - 6313.		LEASE OWNER/COMPANY NAME AMERICAN HUNTER EXPLORATION LIMITED



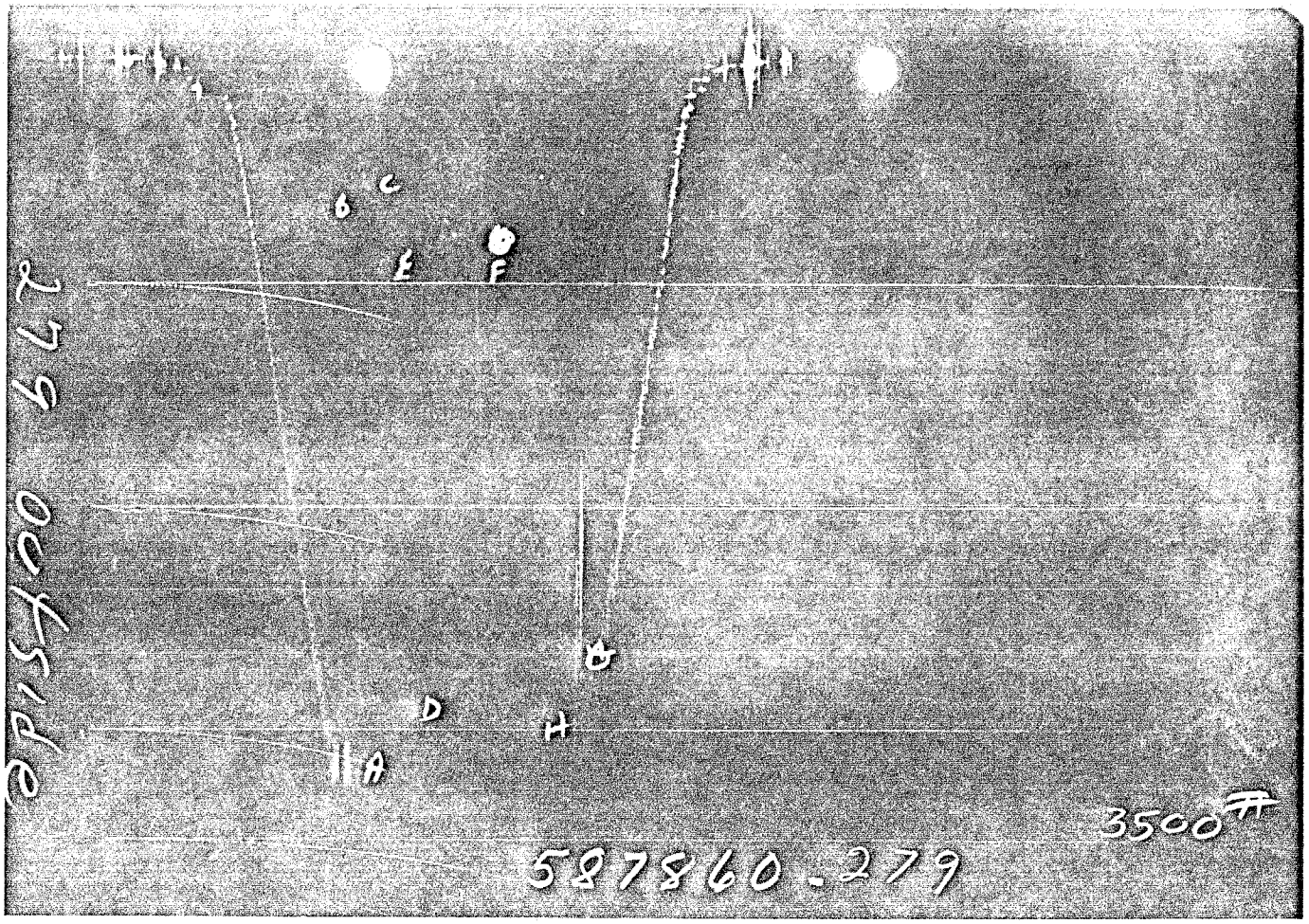
GAUGE NO: 488 DEPTH: 6274.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW	305	132.9	10.0	8.6	F
C	FINAL FIRST FLOW	109	118.1			
C	INITIAL FIRST CLOSED-IN	109	118.1	61.0	59.4	C
D	FINAL FIRST CLOSED-IN	653	104.8			
E	INITIAL SECOND FLOW	43	104.8	61.0	64.6	F
F	FINAL SECOND FLOW		48.7			
F	INITIAL SECOND CLOSED-IN		48.7	120.0	119.3	C
G	FINAL SECOND CLOSED-IN		11.2			
H	FINAL HYDROSTATIC					



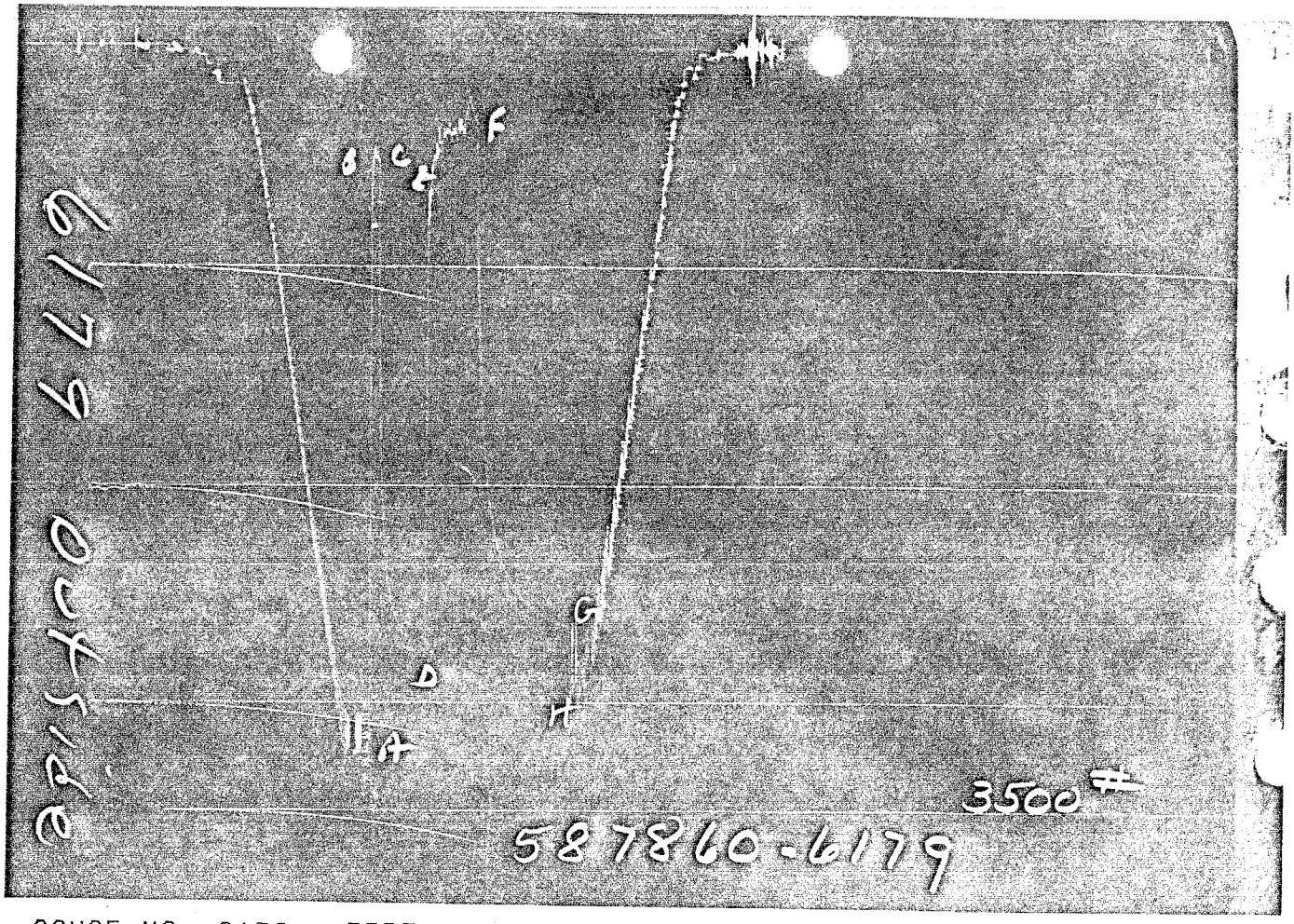
GAUGE NO: 6180 DEPTH: 6290.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3108	3094.3			
B	INITIAL FIRST FLOW	208	313.5	10.0	8.6	F
C	FINAL FIRST FLOW	167	163.8			
C	INITIAL FIRST CLOSED-IN	167	163.8	61.0	59.4	C
D	FINAL FIRST CLOSED-IN	2747	2744.6			
E	INITIAL SECOND FLOW	146	362.6	61.0	64.6	F
F	FINAL SECOND FLOW	62	78.4			
F	INITIAL SECOND CLOSED-IN	62	78.4	120.0	119.3	C
G	FINAL SECOND CLOSED-IN	2641	2639.6			
H	FINAL HYDROSTATIC	3108	2943.9			



GAUGE NO: 279 DEPTH: 6369.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3115	3132.9			
B	INITIAL FIRST FLOW	487	617.1	10.0	8.6	F
C	FINAL FIRST FLOW	576	576.0			
C	INITIAL FIRST CLOSED-IN	576	576.0	61.0	59.4	C
D	FINAL FIRST CLOSED-IN	2757	2772.6			
E	INITIAL SECOND FLOW	841	944.9	61.0	64.6	F
F	FINAL SECOND FLOW	797	817.3			
F	INITIAL SECOND CLOSED-IN	797	817.3	120.0	119.3	C
G	FINAL SECOND CLOSED-IN	2645	2654.4			
H	FINAL HYDROSTATIC	3115	2972.5			



GAUGE NO: 6179 DEPTH: 6373.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3120	3129.9			
B	INITIAL FIRST FLOW	481	559.9	10.0	8.6	F
C	FINAL FIRST FLOW	523	509.3			
C	INITIAL FIRST CLOSED-IN	523	509.3	61.0	59.4	C
D	FINAL FIRST CLOSED-IN	2758	2756.2			
E	INITIAL SECOND FLOW	523	649.4	61.0	64.6	F
F	FINAL SECOND FLOW	314	337.2			
F	INITIAL SECOND CLOSED-IN	314	337.2	120.0	119.3	C
G	FINAL SECOND CLOSED-IN	2630	2650.3			
H	FINAL HYDROSTATIC	3120	2969.2			

EQUIPMENT & HOLE DATA

FORMATION TESTED: _____
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 65.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 8.750
ELEVATION (ft): 0
TOTAL DEPTH (ft): 6373.0
PACKER DEPTH(S) (ft): 6302, 6308
FINAL SURFACE CHOKE (in): 0.750
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.50
MUD VISCOSITY (sec): 46
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 152 @ 6365.0 ft

TICKET NUMBER: 58786000

DATE: 11-15-83 TEST NO: 2

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: BAKERSFIELD

TESTER: R.D.LYONS

WITNESS: WALT ZURBA

DRILLING CONTRACTOR: MONTGOMERY

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm
_____	_____ @ ____°F	_____ ppm

SAMPLER DATA

Psig AT SURFACE: _____
cu.ft. OF GAS: _____
cc OF OIL: _____
cc OF WATER: _____
cc OF MUD: _____
TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ ____°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

15' OF DRILLING FLUID

MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: CHOKE					TICKET NO: 58786000
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
11-15-83					
1906	1"				OPENED TOOL
1910	1"	28#			GAS TO SURFACE
1916	1	28			CLOSED TOOL
2017	.75				OPENED TOOL
2019	.75	30			GAS
2037	.75	20			GAS
2045	.75	17			GAS
2100	.75	15			GAS
2118	.75	15			CLOSED TOOL
2318					PULLED LOOSE

TICKET NO: 58786000

CLOCK NO: 13740 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 488

DEPTH: 6274.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B	1	0.0	132.9		
C	2	8.6	118.1	-14.7	
FIRST CLOSED-IN					
C	1	0.0	118.1		
D	2	59.4	104.8	-13.3	7.5 0.059
SECOND FLOW					
E	1	0.0	104.8		
	2	10.0	103.5	-1.3	
	3	20.0	78.5	-25.0	
	4	30.0	62.8	-15.7	
	5	40.0	54.3	-8.5	
	6	50.0	54.3	0.0	
F	7	64.6	48.7	-5.6	
SECOND CLOSED-IN					
F	1	0.0	48.7		
G	2	119.3	11.2	-37.4	45.4 0.208

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$

REMARKS:

TICKET NO: 58786000

CLOCK NO: 26292 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 6180

DEPTH: 8290.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		FIRST FLOW			
B	1	0.0	313.5		
C	2	8.6	163.8	-149.7	
		FIRST CLOSED-IN			
C	1	0.0	163.8		
	2	4.0	2005.2	1841.4	2.7	0.501
	3	8.0	2286.5	2122.7	4.1	0.318
	4	12.0	2429.9	2266.1	5.0	0.235
	5	16.0	2515.4	2351.6	5.6	0.187
	6	20.0	2575.4	2411.6	6.0	0.156
	7	24.0	2614.9	2451.1	6.3	0.133
	8	28.0	2646.7	2482.9	6.6	0.117
	9	32.0	2669.7	2506.0	6.8	0.104
	10	36.0	2687.0	2523.3	7.0	0.093
	11	40.0	2701.7	2537.9	7.1	0.085
	12	44.0	2715.4	2551.6	7.2	0.078
	13	48.0	2724.9	2561.2	7.3	0.072
	14	52.0	2733.2	2569.4	7.4	0.067
	15	56.0	2740.6	2576.8	7.5	0.062
D	16	59.4	2744.6	2580.8	7.5	0.059
		SECOND FLOW			
E	1	0.0	362.6		
	2	10.0	162.8	-199.8	
	3	20.0	124.2	-38.6	
	4	30.0	103.5	-20.7	
	5	40.0	95.1	-8.5	
	6	50.0	90.4	-4.7	
F	7	64.6	78.4	-12.0	
		SECOND CLOSED-IN			
F	1	0.0	78.4		
	2	8.0	1683.6	1605.3	7.2	1.005
	3	16.0	2018.9	1940.5	13.1	0.747
	4	24.0	2204.5	2126.2	18.1	0.608
	5	32.0	2319.6	2241.2	22.3	0.517
	6	40.0	2394.2	2315.8	25.9	0.452
	7	48.0	2446.7	2368.3	29.0	0.403
	8	56.0	2486.2	2407.8	31.7	0.363
	9	64.0	2519.6	2441.2	34.2	0.331
	10	72.0	2546.1	2467.7	36.3	0.305
	11	80.0	2567.3	2488.9	38.2	0.282
	12	88.0	2588.1	2509.7	40.0	0.263
	13	96.0	2603.9	2525.5	41.6	0.246
	14	104.0	2618.7	2540.3	43.0	0.232
	15	112.0	2630.0	2551.6	44.3	0.219

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
	SECOND CLOSED-IN - CONTINUED				
G	16	119.3	2639.6	2561.2	45.4	0.208

REMARKS:

TICKET NO: 58786000

CLOCK NO: 13680 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 279

DEPTH: 6369.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B	1	0.0	617.1		
C	2	8.6	576.0	-41.1	
FIRST CLOSED-IN					
C	1	0.0	576.0		
	2	4.0	1977.7	1401.7	2.7	0.497
	3	8.0	2283.8	1707.7	4.2	0.317
	4	12.0	2435.0	1859.0	5.0	0.236
	5	16.0	2539.8	1963.8	5.6	0.188
	6	20.0	2602.7	2026.6	6.0	0.156
	7	24.0	2645.2	2069.1	6.3	0.133
	8	28.0	2673.2	2097.1	6.6	0.117
	9	32.0	2697.2	2121.2	6.8	0.104
	10	36.0	2714.8	2138.7	7.0	0.093
	11	40.0	2728.7	2152.7	7.1	0.085
	12	44.0	2741.6	2165.6	7.2	0.078
	13	48.0	2751.9	2175.9	7.3	0.072
	14	52.0	2759.8	2183.8	7.4	0.067
	15	56.0	2767.1	2191.1	7.5	0.062
D	16	59.4	2772.6	2196.5	7.5	0.059
SECOND FLOW					
E	1	0.0	944.9		
	2	10.0	878.6	-66.3	
	3	20.0	873.7	-4.9	
	4	30.0	800.9	-72.8	
	5	40.0	784.2	-16.7	
	6	50.0	794.3	10.0	
F	7	64.6	817.3	23.1	
SECOND CLOSED-IN					
F	1	0.0	817.3		
	2	8.0	1746.7	929.3	7.2	1.008
	3	16.0	2069.2	1251.9	13.1	0.746
	4	24.0	2242.1	1424.7	18.1	0.608
	5	32.0	2345.1	1527.7	22.3	0.517
	6	40.0	2418.1	1600.8	25.9	0.452
	7	48.0	2470.8	1653.5	29.0	0.402
	8	56.0	2510.0	1692.6	31.7	0.363
	9	64.0	2540.2	1722.8	34.2	0.331
	10	72.0	2565.5	1748.2	36.3	0.305
	11	80.0	2586.8	1769.5	38.2	0.282
	12	88.0	2605.5	1788.2	40.0	0.263
	13	96.0	2620.4	1803.0	41.5	0.246
	14	104.0	2633.6	1816.2	43.0	0.232
	15	112.0	2645.9	1828.5	44.3	0.219

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
G	16	119.3	2654.4	1837.0	45.4	0.208

REMARKS:
FLOW READINGS MAY BE QUESTIONABLE

TICKET NO: 58786000

CLOCK NO: 28235 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 6179

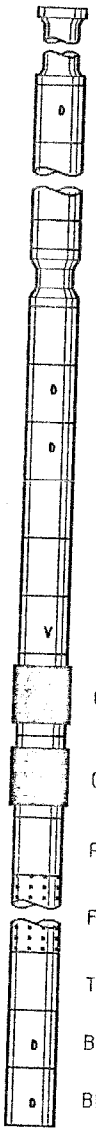
DEPTH: 6373.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B	1	0.0	559.9		
C	2	8.6	509.3	-50.5	
FIRST CLOSED-IN					
C	1	0.0	509.3		
	2	4.0	2015.9	1506.6	2.7 0.499
	3	8.0	2291.1	1781.8	4.2 0.318
	4	12.0	2443.4	1934.1	5.0 0.235
	5	16.0	2530.5	2021.2	5.6 0.187
	6	20.0	2587.3	2078.0	6.0 0.156
	7	24.0	2626.1	2116.8	6.3 0.134
	8	28.0	2657.7	2148.3	6.6 0.117
	9	32.0	2680.2	2170.8	6.8 0.104
	10	36.0	2698.6	2189.3	7.0 0.093
	11	40.0	2712.7	2203.4	7.1 0.085
	12	44.0	2724.7	2215.4	7.2 0.078
	13	48.0	2736.0	2226.7	7.3 0.072
	14	52.0	2743.6	2234.3	7.4 0.067
	15	56.0	2751.5	2242.2	7.5 0.062
D	16	59.4	2756.2	2246.9	7.5 0.059
SECOND FLOW					
E	1	0.0	649.4		
	2	10.0	500.5	-148.8	
	3	20.0	460.5	-40.1	
	4	30.0	385.4	-75.1	
	5	40.0	346.8	-38.6	
	6	50.0	318.5	-28.2	
F	7	64.6	337.2	18.7	
SECOND CLOSED-IN					
F	1	0.0	337.2		
	2	8.0	1690.1	1352.8	7.2 1.009
	3	16.0	2049.0	1711.8	13.1 0.747
	4	24.0	2227.3	1890.1	18.1 0.608
	5	32.0	2336.4	1999.2	22.3 0.517
	6	40.0	2408.7	2071.4	25.9 0.452
	7	48.0	2461.4	2124.2	29.0 0.403
	8	56.0	2502.2	2165.0	31.7 0.363
	9	64.0	2534.6	2197.4	34.2 0.331
	10	72.0	2561.2	2224.0	36.3 0.305
	11	80.0	2581.8	2244.5	38.2 0.282
	12	88.0	2600.2	2263.0	40.0 0.263
	13	96.0	2614.6	2277.4	41.6 0.246
	14	104.0	2629.7	2292.5	43.0 0.232
	15	112.0	2641.2	2303.9	44.3 0.219

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
G	16	119.3	2650.3	2313.1	45.4 0.208

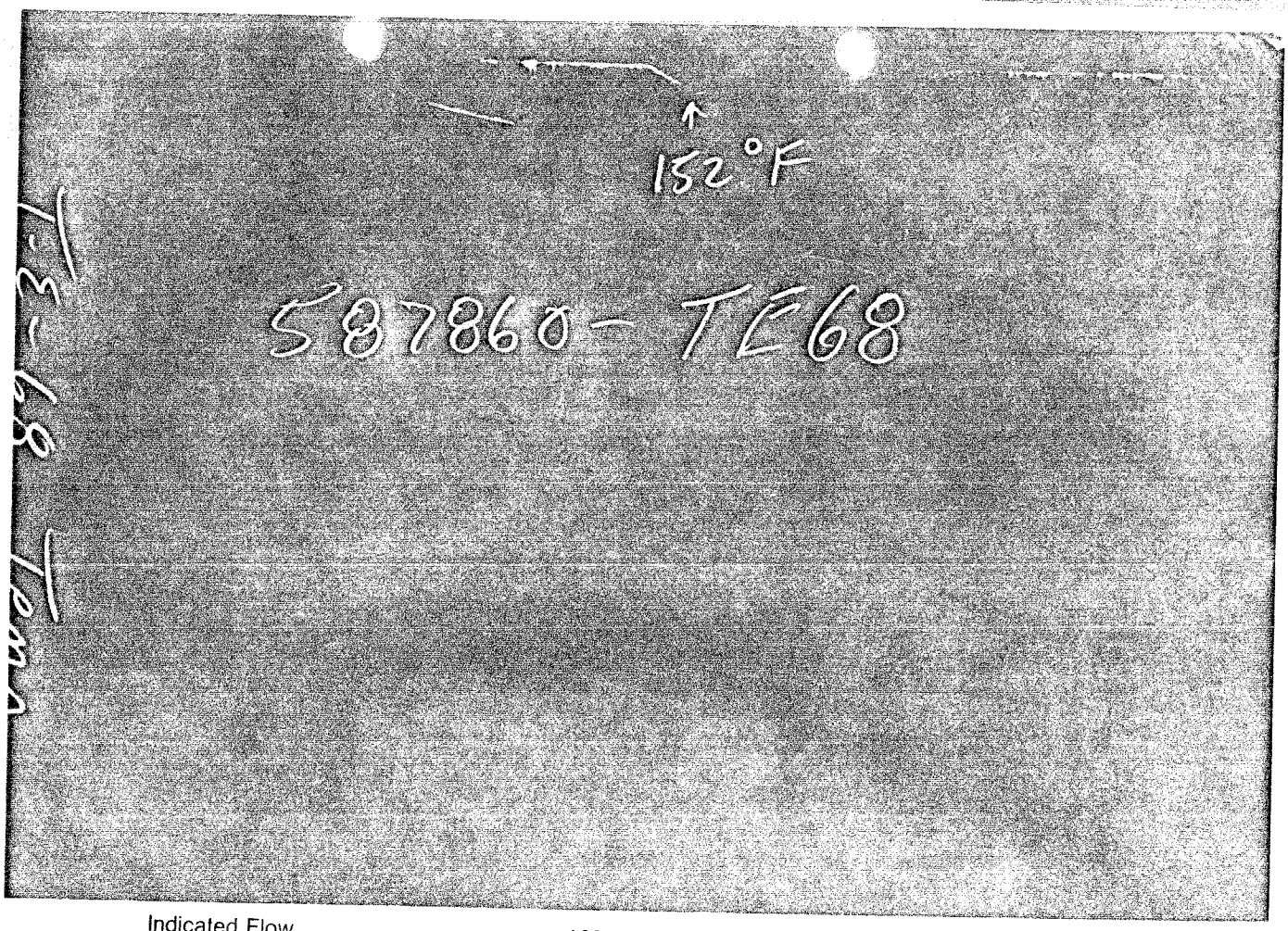
REMARKS:
FLOW READINGS MAY BE QUESTIONABLE

TICKET NO. 58786000



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	5.000	4.276	6100.0	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	6089.0
3	DRILL COLLARS.....	6.000	3.000	180.0	
5	CROSSOVER.....	6.000	3.000	0.9	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	2.250	4.6	
80	AP RUNNING CASE.....	5.000	3.000	4.2	6274.0
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	6288.0
80	AP RUNNING CASE.....	5.000	3.000	4.2	6290.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	6302.0
70	OPEN HOLE PACKER.....	7.750	1.530	5.8	6308.0
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.250	4.2	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	46.0	
82	TEMPERATURE RUNNING CASE.....	5.000	2.440	4.6	6365.0
81	BLANKED-OFF RUNNING CASE.....	5.000		3.9	6369.0
81	BLANKED-OFF RUNNING CASE.....	5.000		4.1	6373.0
	TOTAL DEPTH				6373.0

EQUIPMENT DATA



Indicated Flow Capacity	$kh = \frac{1637\ Q_g\ T}{m}$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Skin Factor	$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi\ \mu\ c_t r_w^2} + 3.23 \right]$	—
Damage Ratio	$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\ mS}$	—
Indicated Flow Rate (Maximum)	$AOF_1 = \frac{Q_g\ m(P^*)}{m(P^*) - m(P_f)}$	MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$	MCFD
Approx. Radius of Investigation	$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_t}}$	ft

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 584-110

DIVISION OF OIL AND GAS

Report on Operations

Jeff Greening, Agent
AMERICAN HUNTER EXPLORATION, LTD.
611 E. Clay, P. O. Box 468
Colusa, CA 95932

Coalinga, Calif.
June 25, 1984

Your operations at well "Souza" 1, API No. 019-21924,
Sec. 36, T14S, R. 12E, M.D. B.& M. ---------- Field, in Fresno County,
were witnessed on 6/19/84. T.S. Boardman, representative of
the supervisor, was present from 1300 to 1900. There were also present Dave Gunderson, Engineer.

Present condition of well: 9-5/8" cem. 1709'; 5-1/2" 10,213', c.p. 10,061'-10,060', 9871'-9870', 9468'-9467', 9352'-9351', 6553'-6552', 6411'-6410', 1400', perfs. 10,045'-9967', 9832'-9689', 9423'-9380', 9199'-9159', 6491'-6466', 6330'-6310'. T.D. 10,217'. Bridge plug 10,177', 9670', 9145', 6401', Retainer 9862', 9460', 6545'. Plugged w/50 sx of cem. below 9862', 50 sx of cem. below 9460', 50 sx of cem. below 9340'. Plugged with cem. 6330'-6155', 1400'-1200'±, 90'±-5'.

The operations were performed for the purpose of abandonment.

DECISION: THE PLUGGING AND CEMENTING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED.

TSB/bcm
cc: Company, Canada

Surf ok
TSB 6/1/84

DEFICIENCIES -- CORRECTED
None

DEFICIENCIES -- TO BE CORRECTED
None

CONTRACTOR: Ganache Well Service, Inc.

M. G. MEFFERD
State Oil and Gas Supervisor

By D. E. Von Matre (for)
Richard F. Curtin - *Deputy Supervisor*

OG109(12-80-15M)

584-110

DIVISION OF OIL AND GAS
Cementing/Plugging Memo

Operator American Hunter Explor. LTD Well No. "Souza" 1
API No. 019 21924 Sec. 36, T. 14S, R. 12E, M.D. B&M
Field _____, County Fresno. On June 19, 1984,
Mr. T.S. Boardman, representative of the supervisor was present from 1300 to 1900.
There were also present Dave Gunderson Engineer

Casing record of well: 9 5/8" cem 1709'; 5 1/2" cem 10213' CP 10061'-10060', 9871'-9870', 9468'-9467', 9352'-9351', 6553'-6552', 6411'-6410' 1400' Perfs 10045'-9967', 9832'-9689', 9423'-9380', 9199'-9159', 6491'-6466' 6330'-6310'. TD 10217'. BP 10177', 9670', 9145', 6401' Retainer 9862', 9460', 6545'. Plugged w/ *

The operations were performed for the purpose of Abandonment

* 50 sx of cem below 9862', 50 sx of cem below 9460', 50 sx of cem below 9340', Plugged w/ cem 6330'-6155', 1400'-1200'±, 90'±-5'

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____' is approved.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
9 5/8 5 1/2				6/19/84	**	15 bbls	1200'±	1200'±	53 cf±		in 5 1/2" CSG @ 1400'

** Displaced cement from surface with 23 bbls mud

Casing/tubing recovered: _____" shot/cut at _____', _____', _____' pulled fr. _____';
_____" shot/cut at _____', _____', _____' pulled fr. _____'.

Junk (in hole): _____

Hole fluid (bailed to) at _____'. Witnessed by _____

Mudding	Date	Bbls.	Displaced	Poured	Fill	Engr.
10.8 PPG	6/19/84	75 bbls	TDG @ 6150		1400	T.S. Boardman

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
6/18/84	6 bbls *	TDG @ 6330'	0930	RPted by Dave Gunderson	6155	3000 #	6/19/84 1332	TS Boardman
6/19/84	15 bbls	fr surface **	1914	TS Boardman	1200'±	calculated	6/19/84	T.S. Boardman
6/19/84	2 bbls	fr surface	1914	T.S. Boardman	5'	visual	6/19/84 1914	T.S. Boardman

* Back-scuttled 1 bbl out

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 586-46

PERMIT TO CONDUCT WELL OPERATIONS

--- (field code)
-- (area code)
Abd. (new pool code)
-- (old pool code)

Jeff Greening, Agent
AMERICAN HUNTER EXPLORATION LTD.
306 Pescado Circle
Rancho Murieta, CA 95683

Coalinga, California
January 28, 1986

Your _____ proposal to ABANDON well "Souza" 1,
A.P.I. No. 019-21924, Section 36, T. 14S, R. 12E, M.D. B. & M.,
---------- field, ---------- area, ---------- pool,
Fresno County, dated 11/12/85, received 1/27/85 has been examined in conjunction with records filed in this office.

THE PROPOSAL, COVERING WORK ALREADY COMPLETED IN ACCORDANCE WITH PRIOR AGREEMENT, IS APPROVED.

Blanket Bond
CP/bcm
cc: Company, Canada

M. G. MEFFERD, State Oil and Gas Supervisor
By Richard A. Curtis
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed [illegible]

"CONFIDENTIAL"

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

RECEIVED
JAN 27 1986
DIVISION OF OIL & GAS
COALINGA

Notice of Intention to Abandon Well

This notice must be given at least five days before work is to begin.

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS	
		OGD114	OGD121
	B	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon well AMERICAN HUNTER SOUZA #1, API No. 019-21924,

Sec. 36, T. 14S, R. 12E, MD B. & M., - Field, FRESNO County.

commencing work on NOVEMBER 4th, 19 83.

The present condition of the well is: Plugged & Abandoned

1. Total depth 10,217

2. Complete casing record, including plugs and perforations

Casing: 9-5/8", 36#/ft, K55, LT&C @ 1709'
5-1/2", 20#/ft, L80, LT&C @ 10213'

Perfs: Lathrop 9990-9999,9975-9986,9967-9971
Set cement retainer @ 9862',
squeeze 6 bbls. cement
Lathrop 9832-9698, 172 shots
Set bridge plug @ 9670'
cont'd below

3. Last produced N/A
(Date) (Oil, B/D) (Gas, Mcf/D) (Water, B/D)

or

4. Last injected N/A
(Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure)

Additional data for dry hole (show depths):

5. Oil or gas shows

DST #1: 6201-6249 Moreno, GTS - 5' flame
DST #2: 6308-6373 Moreno, GTS - 750 MCF
DST #3: 6463-6512 Moreno, GTS - 400 MCF
DST #4, #5: 9156-9200 Lathrop - MR
DST #6, #7, #8: 9382-9433, 9652-9778 Lathrop-MR

6. Stratigraphic markers

Tumey	2572	Moreno Shale	5130
Kreyenhegen	2992	Bluewett	6540
Domengine	3655	Tracey	7437
		Lathrop	9159

7. Formation and age at total depth
Lathrop

8. Base of fresh water sands 1700'

The proposed work is as follows:

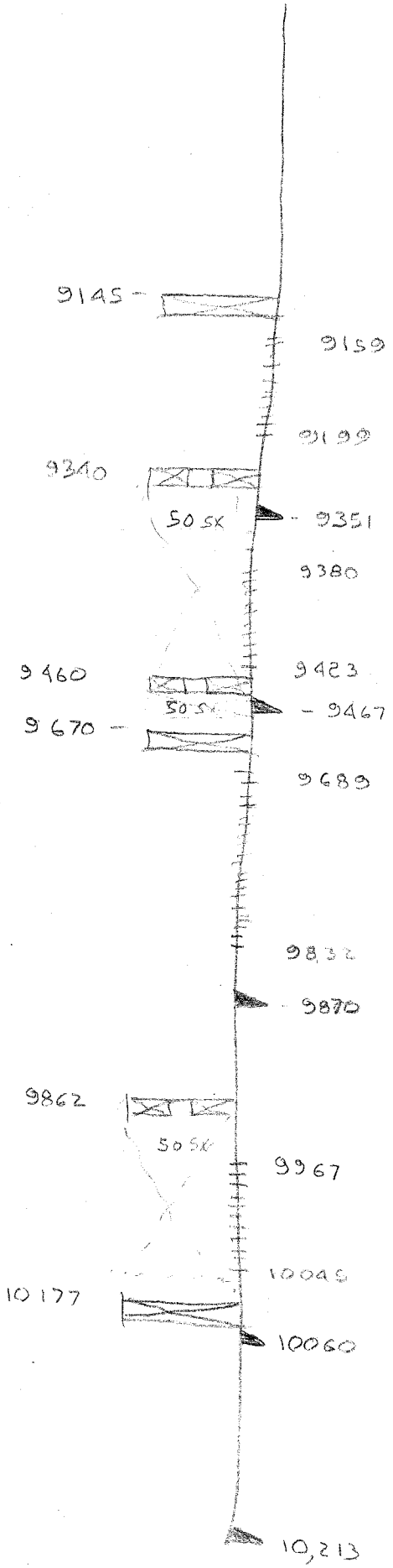
Perfs: Lathrop 9380-9423, 86 shots
Set cement retainer @ 9340'
Squeeze 50 sks cement
Lathrop 9192-9199, 9182-9185, 9159-9176, 57 shots
Set bridge plug @ 9145'
Moreno 6491-6466
Set bridge plug @ 6401'
Moreno 6310-6330
Spot 6 bbls. cement across perfs.
9-5/8"-5-1/2" Casing Annulus: 1399-1400
Circulate 15 bbls. cement between casings
Inside 5-1/2" Casing: Spot 2 bbls. cement in casing
5' - 30'. Cut off casing 6' below ground
level.

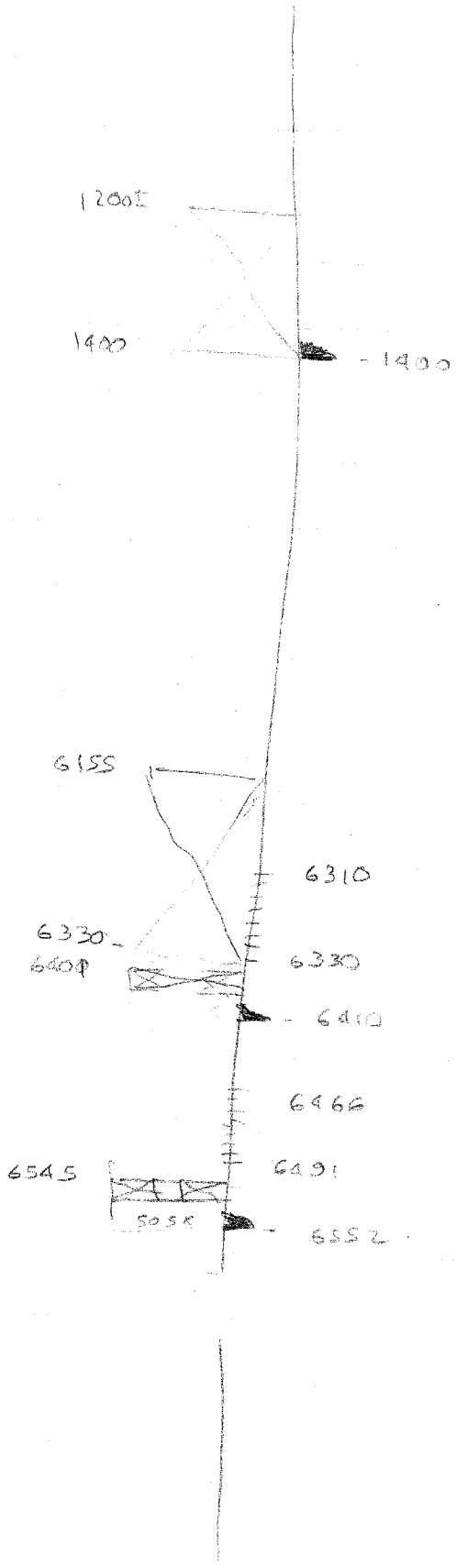
It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 435 - 4th Avenue S.W. (Street)
Calgary (City) Alberta (State) T2P 3A8 (Zip)
Telephone Number (403) 260-1824 (Area Code) (Number)

AMERICAN HUNTER EXPLORATION LTD. (Name of Operator)
By RAY SHEPERT (Print Name)
Ray Shepert (Signature) 85-11-12 (Date)

2424 Evans St
MT 59701





MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION

COALINGA, Calif.

JUNE 18 1984

Operator AMERICAN HUNTER Well No. "SOUZA" 1

Field FRESNO COUNTY Sec. 36 T. 14S. R. 12E M.D B&M

personal
A telephone conversation was held, concerning above well, with Mr. DAVE GUNDERSON 9:30 A.M.
for above operator on JUNE 18 1984 at 8:40 A.M.

Details of the conversation were as follows:

PRESENT CONDITION

BRIDGE PLUG @ 9140'

CP @ ± 6510' RETAINER 6520' ?

PERF 6491' - 6466'

BRIDGE PLUG @ 6400'

PERF 6330' - 6310'

WILL NEED FOR ABANDONMENT

PLUG FROM 6330' - 6210' (WITNESS TAG OR IF DONE W/RETAINER @ 6210 WITNESS THE OPERATION)

WITNESS MUDDING

PERF OR CAVITY @ 1400 (FOR BFW)

CEM BEHIND 5½" FROM 1400 TO 1200'

PLUG INSIDE 5½" FROM 1400 TO 1200'

(IF SQZ'D W/RETAINER OR BRADENHEADED WITNESS OPERATION)

SURF PLUG 5 - 30' (GR) INCLUDING ANNULUS

CLEAN UP LOCATION

SEND NOTICE

(Signed) D. E. Von Matern

Title ASSOC O & G ENGR

OG136 (11-74-GSR1-5M) (see reverse side for proposed well operations)

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION
(Proposed Well Operations)

Operator _____ Well No. _____

Field _____ Sec. ____ T. ____ R. ____ _____ B&M

personal
A telephone conversation was held, concerning above well, with Mr. _____

_____ for above operator _____ 19____, at _____ M.

Details of the conversation were as follows:

Total depth _____ Plugs _____

Casing record _____

_____

Oil or gas showings _____

Results of tests _____

_____

Stratigraphic markers _____

_____

Geologic age at bottom _____ Base of fresh water _____

Operator proposes the following work:

_____

_____

_____

_____

Additional requirements outlined:

Test of W.S.O. to be witnessed by D.O.G. at _____ By operator at _____

Plugs to be located by D.O.G. at _____ By operator at _____

Notice to be filed immediately ( ) Yes ( ) Not necessary

Other data _____

_____

(Signed) _____

Title _____

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION

COALINGA, Calif.

MAY 18 1984

Operator AMERICAN HUNTER Well No. "SOUZA" 1

Field FRESNO COUNTY Sec. 36 T. 14S. R. 12E. M.D. B&M

A ~~personal~~ telephone conversation was held, concerning above well, with Mr. CHARLEY JACKSON for above operator on MAY 18 1984 at 8:15 A.M.

Details of the conversation were as follows:

HAVE SQUEEZED LOWER PERFS THRU RETAINER

PRESENTLY HAVE PERFS 9199 TO 9159 AT INTERVALS

PROPOSE TO

ABANDON WITH BRIDGE PLUG @ 9140

AND CONTINUE TESTING

APPROVED

(Signed) [illegible]

Title ASSOC. O & G ENGR.

(see reverse side for proposed well operations)

OG136 (11-74-GSR1-5M)

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION
(Proposed Well Operations)

Operator _____ Well No. _____

Field _____ Sec. _____ T. _____ R. _____ _____ B&M

personal
A telephone conversation was held, concerning above well, with Mr. _____

_____ for above operator _____ 19____, at _____ M.

Details of the conversation were as follows:

Total depth _____ Plugs _____

Casing record _____

_____

Oil or gas showings _____

Results of tests _____

_____

Stratigraphic markers _____

_____

Geologic age at bottom _____ Base of fresh water _____

Operator proposes the following work:

_____

_____

_____

_____

Additional requirements outlined:

Test of W.S.O. to be witnessed by D.O.G. at _____ By operator at _____

Plugs to be located by D.O.G. at _____ By operator at _____

Notice to be filed immediately ( ) Yes ( ) Not necessary

Other data _____

_____

(Signed) _____

Title _____

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION

CORALINGA, Calif.

APRIL 26 1984

Operator AMERICAN HUNTER Well No. "SOUZA" 1

Field FRESNO COUNTY Sec. 36 T. 14S. R. 12 E. M.D. B&M

~~personal~~

A telephone conversation was held, concerning above well, with Mr. DAVE GUNDERSON

for above operator on APRIL 26, 1984 at 8:40 P.M.

Details of the conversation were as follows:

PRESENT WELL CONDITION

9 5/8" CEM 1709'

5 1/2 CEM 10,213 CP 9871

T.D. 10,217

PERF (@ INTERVALS?) 10,085 - 9967

PROPOSE TO

SET RETAINER @ 9862 AND SQUEEZE ABOVE ZONE & CP

TEST INTERVAL ABOVE RETAINER

APPROVED

(Signed) D. E. Duncan

Title ASSOC O & G ENGR.

OG136 (11-74-GSR1-5M)

(see reverse side for proposed well operations)

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION
(Proposed Well Operations)

Operator _____ Well No. _____

Field _____ Sec. ____ T. ____ R. ____ _____ B&M
personal

A telephone conversation was held, concerning above well, with Mr. _____

_____ for above operator _____ 19____, at _____ M.

Details of the conversation were as follows:

Total depth _____ Plugs _____

Casing record _____

_____

Oil or gas showings _____

Results of tests _____

_____

Stratigraphic markers _____

_____

Geologic age at bottom _____ Base of fresh water _____

Operator proposes the following work:

_____

_____

_____

_____

Additional requirements outlined:

Test of W.S.O. to be witnessed by D.O.G. at _____ By operator at _____

Plugs to be located by D.O.G. at _____ By operator at _____

Notice to be filed immediately ( ) Yes ( ) Not necessary

Other data _____

_____

(Signed) _____

Title _____

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION

COALINGA, Calif.

DECEMBER 7 1983

Operator AMERICAN HUNTER Well No. "SOUZA" 1

Field FRESNO CO. Sec. 36 T. 14S. R. 12E. M.D. B&M

A ~~personal~~ telephone conversation was held, concerning above well, with Mr. DON MYER (403) 260-1740 for above operator on DECEMBER 7 1983 at 3:00 P.M.

Details of the conversation were as follows:

INQUIRE ABOUT CEMENTING OF COMPLETION STRING & W.S.O.

PRESENTLY CORING AT 9830 AND HAVE HAD SEVERAL DST'S.

(Signed) [signature]

Title ASSOC O & G ENGR.

OG136 (11-74-GSR1-5M)

(see reverse side for proposed well operations)

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION
(Proposed Well Operations)

Operator _____ Well No. _____

Field _____ Sec. ____ T. ____ R. ____ _____ B&M

personal
A telephone conversation was held, concerning above well, with Mr. _____

_____ for above operator _____ 19____, at _____ M.

Details of the conversation were as follows:

Total depth _____ Plugs _____

Casing record _____

_____

Oil or gas showings _____

Results of tests _____

_____

Stratigraphic markers _____

_____

Geologic age at bottom _____ Base of fresh water _____

Operator proposes the following work:

_____

_____

_____

_____

Additional requirements outlined:

Test of W.S.O. to be witnessed by D.O.G. at _____ By operator at _____

Plugs to be located by D.O.G. at _____ By operator at _____

Notice to be filed immediately ( ) Yes ( ) Not necessary

Other data _____

_____

(Signed) _____

Title _____

American Hunter Explora Ltd.
999 18th. Street, Suite 315
Denver, Colorado 80202

american hunter

TRANSMITTAL

TO: State of California
Oil and Gas Commission
P.O. Box 665
Coalinga, CA 93210

DATE: April 19, 1984

RE: WELL NAME: American Hunter Souza #1
Sec 36 T14S, R12E, Fresno Co., CA

ENCLOSED PLEASE FIND THE FOLLOWING:

1. _____ copies of A.P.E. for _____
2. _____ copies of Survey Plan
3. _____ copies of Well Licence Application
4. _____ copies of Geological Prognosis and Drilling Program
5. _____ copies of Approved Well Licence
6. _____ copies of Field Prints of Logs
7. _____ copies of Final Prints of Logs
8. 1 copies of DST Charts/Reports
9. 1 copies of Drilling/Completion Report
10. _____ copies of Fluid (gas, water, oil) Analysis
11. _____ copies of Geological Report
12. 1 copies of Core Analysis/Description
13. 1 copies of Natural Gamma Ray, High Resolution Dipmeter, DIL-SFL, Electromagnetic Prop.
14. _____ copies of Litho Density-Comp Neut., Cyberlook, DIL-SFL, Borehole Compensated Sonic,
15. _____ copies of Microlog, Borehole Comp. Sonic, Down Mudlog, Sidewall Sample log,
16. Nat. Gamma Ray, RUN 1 - Dual Induction, Cyberlook, Litho Density,
17. Sonic Log

RECEIVED
APR 20 1984
DIVISION OF OIL & GAS
COALINGA

Sent by James M. Parker

REMARKS: The Division of Oil and Gas requires duplicate sets of records, logs, histories etc. Please send 1 more set of all logs listed above. Thank you

RECEIVED BY: T.S. Boardman DATE: 4/26/84

PLEASE ACKNOWLEDGE RECEIPT BY SIGNING AND RETURNING THE ENCLOSED COPY.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 583-164

DIVISION OF OIL AND GAS

Report on Operations

Jeff Greening, Agent
AMERICAN HUNTER EXPLORATION, LTD.
611 E. Clay, P. O. Box 468
Colusa, CA 95932

Coalinga, Calif.
November 10, 1983

Your operations at well "Souza" 1, API No. 019-21924,
Sec. 36, T. 14S R. 12E M.D. B.& M. ---------- Field, in Fresno County,
were witnessed on 11/8/83. C. Parli, representative of
the supervisor, was present from 0130 to 0327. There were also present Joe Lindsey,
Pusher for Montgomery
Present condition of well: 9-5/8" cem. 1709'. T.D. 1709' (standing cemented).

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION: THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

CP/bcm
cc: Company, Canada

DEFICIENCIES -- CORRECTED
None

DEFICIENCIES -- TO BE CORRECTED
None

CONTRACTOR: Montgomery Drilling

M. G. MEFFERD,
State Oil and Gas Supervisor

By W. E. Van Matre (for)
Deputy Supervisor
Richard F. Curtin -

OG109(12-80-15M)

VEW

T 583-164

DIVISION OF OIL AND GAS
BLOWOUT PREVENTION EQUIPMENT MEMO

Operator AMERICAN HUNTER EXPLOR. LTD Well "Souza" 1 Field — County Fresno

019-21924

VISITS:	Date	Engineer	Time		Operator's Rep.	Title
1st	11-8-83	C. Parli	0130	to 0327	Joe Ludsen	Pusher for Montgomery
2nd				to		

Casing record of well: 9⅝" cem 1709 T.D 1709 (Stand up Cemented)

OPERATION: Testing (~~inspecting~~) the blowout prevention equipment and installation.
DECISION: The blowout prevention equipment and installation are approved.

Proposed Well Opns: _____ MPSP: _____ psi

REQUIRED BOPE CLASS: III A 3M

Hole size: _____" fr. _____' to 1709 ', 8¾" to _____' & _____" to _____'

CASING RECORD (BOPE ANCHOR STRING ONLY)					Cement Details	Top of Cement	
Size	Weight(s)	Grade (s)	Shoe at	CP at		Casing	Annulus
9⅝	36	K-55	1709		160 Sx 2:1 poz 2% Gel 3% CaCl2 .2% D46 205 Sx "G" 2% CaCl2		40-45 BBLs

BOP STACK							a	b	a/b	TEST DATA			
API Symb.	Ram Sz.	Mfr.	Model or Type	Size In.	Press. Rtg.	Date Last Overhaul	Gal. to Close	Rec.Time Min.	Calc.GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.
A		Shaffer	Sph	13⅝	5000							11-8-83	1500
P	5"	"		13⅝	5000							11-8-83	1500
B		"		13⅝	5000							11-8-83	1500
S													

ACTUATING SYSTEM

Accum.Unit(s) Wkg.Press. 3000 psi
Total Rated Pump Output _____ gpm
Distance From Well Bore + 70 ft.

	Mfr.	Accum. Cap.	Precharge
1	Koomey	1200 gal.	1000 psi
2		gal.	psi

CONTROL STATIONS	Elec.	Hyd.
Manif. at accum.unit		✓
Remote at Drlr's stn.	✓	
Other:		

EMERG. BACKUP SYST.	Press.	Wkg. Fl.
N2 Cyl No:5 Tpe:G	1 2200	gal
Other:	2	gal
	3	gal
	4	gal
	5	gal
	6	gal

AUXILIARY EQUIPMENT

	No.	Sz. (in)	Rated Press.	Connections Weld	Flan.	Thrd.	
✓ Fill-Up Line							
✓ Kill Line		3	5000	✓	✓		1500
✓ Control Valve(s)	2		5000		✓		1500
✓ Check Valve(s)	1		5000		✓		1500
✓ Auxil. Pump Connec.			5000		✓		1500
✓ Choke Line		3	5000	✓	✓		1500
✓ Control Valve(s)	2		5000		✓		1500
✓ Pressure Gauge				✓	✓		
✓ Adjustable Choke(s)	1 & 2	3	5000		✓		1500
✓ Bleed Line		3			✓		
✓ Upper Kelly Cock							1500
✓ Lower Kelly Cock		4	5000				1500
✓ Standpipe Valve							1500
✓ Standpipe Pressure Ga.							
✓ Pipe Safety Valve		3"	—				—
✓ Internal Preventer		5	—				—

HOLE FLUID MONITORING EQUIPMENT	Alarm Aud.	Alarm Vis.	Class
Calibrated Mud Pit			A
✓ Pit Level Indicator	✓	✓	B
✓ Pump Stroke Counter	✓	✓	
✓ Pit Level Recorder		✓	C
✓ Flow Sensor	✓	✓	
✓ Mud Totalizer		✓	
Calibrated Trip Tank			
Other:			

REMARKS: ☐ 1 HCR

Hole Fluid Type	Weight	Storage-Pits

OGD 9(5-79-DWRR-3M)

DEFICIENCIES — TO BE CORRECTED None

DEFICIENCIES — CORRECTED None

CONTRACTOR Montgomery Drilling

DEPARTMENT OF CONSERVATION

No. P 583-328

(field code)
--
(area code)
--
(new pool code)
--
(old pool code)

REPORT ON PROPOSED OPERATIONS

Jeff Greening, Agent
AMERICAN HUNTER EXPLORATION LTD.
P. O. Box 468
Colusa, CA 95932

Coalinga, California
October 13, 1983

Your ____ proposal to drill well "Souza" 1,
A.P.I. No. 019-21924, Section 36, T. 14S, R. 12E, M.D. B. & M.,
---------- field, ---------- area, ---------- pool,
Fresno County, dated 10/6/83, received 10/12/83 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Sufficient cement shall be pumped back of the 9-5/8" casing to fill to the surface.
2. Mud fluid of sufficient weight and proper consistency to prevent blowouts shall be used in drilling, and the column of mud fluid shall be maintained to the surface at all times, particularly while pulling the drill pipe.
3. Blowout prevention equipment conforming to Division of Oil and Gas Class III A 3M is installed on the 9-5/8" casing and maintained ready for use at all times. Copy of requirements is enclosed.
4. Blowout-prevention practice drills are conducted at least weekly and recorded in the log book.
5. Sufficient cement shall be used to fill the annular space behind the 5-1/2" casing to at least 500' above oil and gas zones and excessive pressure intervals.
6. THIS DIVISION SHALL BE NOTIFIED:
   a. TO WITNESS a pressure test of the blowout-prevention equipment prior to drilling out the shoe of the 9-5/8" casing.
   b. TO WITNESS a test of the 5-1/2" water shut-off immediately above the objective zone.

NOTE: To contact this Division call (209) 935-2941.

Blanket Bond
VEV/bcm
cc: Company, Canada

M. G. MEFFERD, State Oil and Gas Supervisor
By Richard F. Curtis
Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

RECEIVED
OCT 12 1983
DIVISION OF OIL & GAS
COALINGA

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS____	NEG. DEC. ☐ S.C.H. NO.____	E.I.R. ☐ S.C.H. NO.____	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☑

See Reverse Side

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
W38	10-12-83	✓	[illegible]	✓	✓

In compliance ~~with Section 3203,~~ C.U.P. 2016 Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well "SOUZA" 1, API No. 019-21924 (Assigned by Division)

Sec. 36, T. 14S, R. 12E, M.D. B. & M., - Field, Fresno County.

Legal description of mineral-right lease, consisting of 640 acres, is as follows: (Attach map or plat to scale)
all of section 36

Do mineral and surface leases coincide? Yes ✓ No____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 657.38 feet E (Direction) along section/~~property~~ (Cross out one) line and 654.18 feet N (Direction) at right angles to said line from the South ¼ corner of section/~~property~~ (Cross out one) 36 or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☑

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth:
- feet - (Direction) and - feet - (Direction)

Elevation of ground above sea level 423.8 feet.

All depth measurements taken from top of Kelly Bushing (Derrick Floor, Rotary Table, or Kelly Bushing) that is 26 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
9 5/8	36#	K55	Surface	1700'	0 - 1700	800 ft.^{3}
5 1/2	17#	MN80	Surface	10,200'	10200-6150	1228 ft.^{3}
					3800-1700	640 ft.^{3}

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Lathrop(9245'), 4300 psi.(normal H_2O grad.) (Name, depth, and expected pressure) Estimated total depth 10,200'

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
American Hunter Exploration Ltd.	Corporation	
Address	City	Zip Code
700, 435 Fourth Avenue S.W.	Calgary, Alberta, Canada	T2P 3A8
Telephone Number / Name of Person Filing Notice	Signature	Date
403-260-1847 / Don Snydmiller	[signature]	83-10-06

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

OG105 (10-78-GSRI-10M)

County of FRESNO

Resources and Development Department

WAIVER OF APPEAL PERIOD

Application CUP #2016
Date Approved 10/12/83
Required Appeal Period 15 DAYS

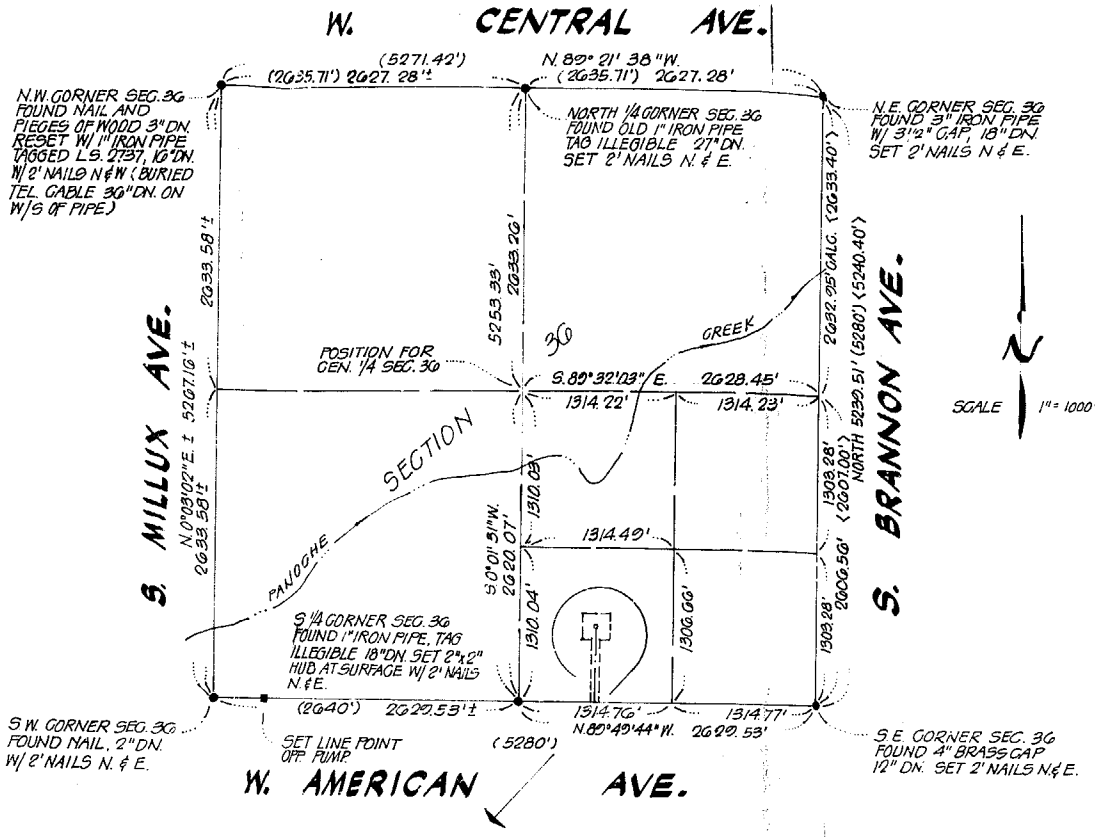
The undersigned hereby agrees to meet all the requirements of the above approval, and requests the Director of the Resources and Development Department of the County of Fresno to issue all necessary construction permits and perform the necessary construction inspections to determine Code compliance authorized by the above approval prior to the expiration of the required appeal period.

The undersigned further agrees that should the above application not become effective for any reason, the permittee or owner shall remove any improvements or construction authorized by this application (if in conflict with existing zoning regulations) within 30 days after written notice from the Director of the Department of Resources and Development, and restore said property as nearly as practicable to it's prior condition.

The undersigned further agrees to hold the County of Fresno harmless for any damages incurred in the event the removal of the improvements are required as provided above; the undersigned also agrees to pay all costs of court and counsel incurred in the event legal action is required to enforce the provisions of this waiver.

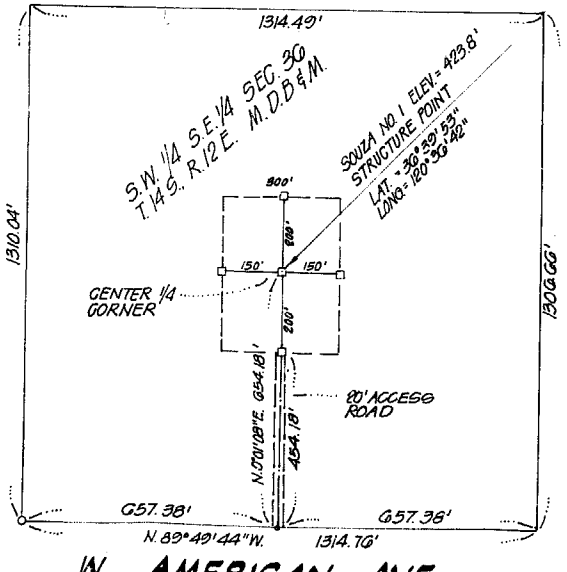
Owner's Name _____	Permittee's Name AMERICAN HUNTER EXPLORATION LTD.
Signed _____	Signed B Macdonald
Date: _____	Date: Oct 12, 1983
Accepted By _____	Date: 10/12/83

F-183
3/83



LEGEND

- • CORNERS FOUND AND ACCEPTED AS NOTED
- □ SET 1"x 2" STAKES, FLUSH
- (...) DATA PER GOVERNMENT SURVEY
- ⟨...⟩ DATA PER SCOTT McKAY RECORD BK. 62 PG. 14 MARCH 1912.
- ◦ SET NAIL AND TIN



W. AMERICAN AVE.

DETAIL

SCALE · 1" = 300'

MAP OF SURVEY

OF SECTION 36, T. 14 S., R. 12 E., M.D.B. & M.

for

AMERICAN HUNTER EXPLORATION L. T. D.

by

W.O. GENTRY
4780 E. TULARE AVE.
TELEPHONE

LICENSED LAND SURVEYOR
FRESNO, CALIFORNIA 93702
(209) 251-7527

JN. 83-058
FB. 516-17

Well Records for Artificial Penetration #20

Blue Agave #1

(API No. 1924225)

DEPARTMENT OF CONSERVATION

Managing California's Working Lands

Division of Oil, Gas, & Geothermal Resources

466 North 5th Street • COALINGA, CALIFORNIA, 93210

PHONE 559/935-2941 • FAX 559/935-5154 • WEBSITE conservation.ca.gov

COMPLIANCE LETTER

March 17, 2016

Mr. Steve Black
Holmes Western Oil Corporation
4300 Midway Road
Taft, CA 93268

FIELD: Coalinga; LEASE: ; SEC.8 T.21S R.15E
DATE OF INSPECTION: 03/16/2016
INSPECTOR: Colin Lawson

Dear Mr. Black:

The inspection listed above has determined that the following **Lease** is in compliance with the Division of Oil and Gas environmental regulations. If you have any questions regarding this matter, please contact the above referenced inspector, at (559) 935-2941.

Sincerely,

Tim Boardman
District Deputy

37720.CMP

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
466 N. Fifth Street Coalinga, CA 93210-1793
Phone:(559) 935-2941 Fax:(559) 935-5154

REPORT OF WELL ABANDONMENT

Coalinga, California
March 14, 2016

Mr. Wolf E. Regener
R&R Resources, LLC (R0177)
760 Paseo Camarillo, Suite 350
Camarillo, CA 93010

Your report of abandonment of well **"Blue Agave" 1**, A.P.I. No. **019-24225**, Section **32**, T. **14S**, R. **13E**, **MD** B.&M., **Cheney Ranch Gas** field, **Fresno** County, dated **2/25/2016**, received **3/14/2016**, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

NOTE:
1. Surface plugging completed on 11/24/2015.

2. Site inspection made and approved on 12/8/2015.

Blanket Bond

Kenneth A. Harris Jr.
State Oil and Gas Supervisor

By _____
Tim Boardman
Senior Oil & Gas Engineer

gm

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
466 N. Fifth Street Coalinga, CA 93210-1793
Phone:(559) 935-2941 Fax:(559) 935-5154

REPORT OF WELL ABANDONMENT

Coalinga, California
March 14, 2016

Mr. Wolf E. Regener
R&R Resources, LLC (R0177)
760 Paseo Camarillo, Suite 350
Camarillo, CA 93010

Your report of abandonment of well **"Blue Agave" 1**, A.P.I. No. **019-24225**, Section **32**, T. **14S**, R. **13E**, **MD** B.&M., **Cheney Ranch Gas** field, **Fresno** County, dated **2/25/2016**, received **3/14/2016**, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

NOTE:
1. Surface plugging completed on 11/24/2015.

2. Site inspection made and approved on 12/8/2015.

Blanket Bond

Kenneth A. Harris Jr.
State Oil and Gas Supervisor

By _____
Tim Boardman
Senior Oil & Gas Engineer

gm

OG159

DIVISION OF OIL, GAS GEOTHERMAL RESOURCES
CHECK LIST - RECORDS RECEIVED AND WELL STATUS

Company R&R Resources, LLC Well No. "Blue Agave" 1

API # 019-24225 Sec. 32, T. 14S, R. 13E, M. D. B. & M.

Field Cheney Ranch Gas (ABD) County Fresno

Well Type	Well Status
DG	ABD

Old pool 05 New pool –

Electric Logs

RECORDS COMPLETE 3-14-16 GM

Wellstat yes, C.h. 12/8/2015

Surface Inspection yes, C.h. 12/8/2015

CLOSE "P" 3-14-16 GM

Notes:

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

HISTORY OF OIL OR GAS WELL

Operator R&R Resources, LLC Field Cheney Ranch County Fresno

Well Blue Agave #1 Sec. 32 T. 14S R. 13E MDB.&M.

A.P.I. No. 019-24225 Name Wolf Regener (Person submitting report) Title President (President, Secretary, or Agent)

Date 02/25/2016 (Month, day, year)

Signature

Address 760 Paseo Camarillo, Suite 350, Camarillo, CA 93010 Telephone Number 805-484-3613

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Date	
11-20-15	Start JSA. Meet and greet with Rig, Harzard hunt, tailgate meeting. Spot and Rig up equipment. Safety meeting before coil RIH. RIH with Coil and Tag @887'. DOGGR requested to circulate down to 1,160'. Attempted to make hole, made hole down to 894' w/40 bbl H20. Safety meeting before pumping Cement. Pumped 3 bbl H20 ahead. Mixed and pumped 410 cuft (73 bbl) class G-35% SF @15.6 ppg @1.3 BPM @ 2800 psi while coil came out of hole @23 ft/minute. Brining cement from 894' to surface, displaced coil with 9 BBL H20, shutdown. Wash through coil. Rig down coil, wash pumps and lines. RDMO, run in hole and cleanout to 382 feet.
11-23-15	Cut off wellhead
11-25-15	DOGGR confirmed surface plug (Colin Lawson)
11-27-15	Welded plate on conductor, backfilled and cleaned location
11-30-15	DOGGR confirmed location cleanup

RECEIVED
MAR 14 2016
DIVISION OF OIL & GAS
COALINGA

R & R Resources, LLC

March 10, 2016

Department of Conservation
Division of Oil, Gas & Geothermal Resources
466 N Fifth Street
Coalinga, CA 93210-1793

Blue Agave 1

Dear Ladies and/or Gentlemen:

Enclosed are two originals of the well history for the abandonment of the Blue Agave #1 well.

If you need anything else please let us know.

Sincerely,

Wolf E. Regener
President

WER NSP
Enclosures

RECEIVED
MAR 14 2016
DIVISION OF OIL & GAS
COALINGA

760 Paseo Camarillo, Suite 350
Camarillo, California 93010 805-484-3613

NATURAL RESOURCES AGENCY OF CALIFORNIA

DEPARTMENT OF CONSERVATION

DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES

466 N. Fifth Street, Coalinga, CA 93210-1793 Phone:(559) 935-2941

NOTICE OF RECORDS DUE

Coalinga, California
3/2/2016

Mr. WolfE. Regener
R&R Resources, LLC (R0177)
760 Paseo Camarillo, Suite 350
Camarillo, CA 93010

In accordance with Division 3 of the California Public Resources Code, the following records are due (covering the abandonment notice dated 10/8/2015) for your well. "Blue Agave" 1 (019-24225).

Cheney Ranch Gas Field, Fresno County, Sec. 32, T. 14S, R. 13E, MD B.&M.

Records, in duplicate are due within 60 days after completion of any well work or tests. Failure to provide such records may result in enforcement action, including issuance of violations, civil penalties and orders of the supervisor, pursuant to PRC 3236.5.

☐ Well Summary (Form OG 100)	☐ All Logs	☐ Velocity Survey
☒ History (Form OG 103, OGG 103)	☐ Dipmeter (computed)	☐ Temperature Survey
☐ Core of sidewall sample (Form OG 101, OGG 101)	☐ Oil and/or gas analysis	☐ Spinner survey
☐ Directional survey	☐ Water analysis	☐ Standard Annular Pressure Test
☐ Other	☐ Pressure measurements (flowing or static)	☐ RA Tracer survey (fluid migration test)

REPORTS FOR THE MONTH OF : *Production, oil and gas disposition, and injection reports are due on or before the 30th day of each month for the preceding calendar month. Division forms must be signed in the spaces provided.*

OIL AND GAS OPERATION	GEOTHERMAL OPERATION
☐ Production and disposition reports (Form OG 110 or computer report)	☐ Production reports (Form OGG 110)
☐ Injection reports (Form OG 110B or computer report)	☐ Injection reports (Form OGG 110B)

Name: Glenn Muggelberg	Title: Associate Oil & Gas Engineer	Signature: Glenn D Muggelberg

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
466 N. Fifth Street Coalinga, CA 93210-1793
Phone:(559) 935-2941 Fax:(559) 935-5154

REPORT ON OPERATIONS

No. T**515-0252**

Mr. Wolf E. Regener
R&R Resources, LLC (R0177)
760 Paseo Camarillo, Suite 350
Camarillo, CA 93010

Coalinga, California
December 08, 2015

Your operations at well **"Blue Agave" 1**, A.P.I. No. **019-24225**, Sec. **32**, T. **14S**, R. **13E**, **MD** B. & M., **Cheney Ranch Gas** field, in **Fresno** County, were witnessed on **11/25/2015**. **Colin Lawson**, a representative of the supervisor, **was present from 0800 to 1100. Also present was N/A.**

The operations were performed for the purpose of **abandonment**.

DECISION:

THE PLUGGING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED.

Kenneth A. Harris, Jr.
State Oil and Gas Supervisor

By _____
Tim Boardman
District Deputy

COL/col
OG109

API# **019-24225**

T# _____

Operator **R&R Resources, LLC** Field **Cheney Ranch Gas (ABD)**

Sec. **32** T. **14S** R. **13E** Well No. **"Blue Agave" 1** County **Fresno**

Casing History
16" cem 40'; 9 5/8" cem 820'; ED 1160'.

On November 24, 2015, Colin Lawson, representative of the supervisor, was present from 08:00 to 11:00 There was also present N/A

The operations were performed for the purpose of abandonment

Decision: **APPROVED**

Deficiencies: **None**

Mudding	Date	Bbls.	Placement method	Filled to:	Engineer

Cavity shots & perforations				
Shot type	From	To	Date	Engineer

Squeeze				
Date	Method	Sqz. vol.	Final pres.	Ann. fill

Placing witnessed					
Date	Material	Volume	Placing method	Time	Engineer
	Cement				
11/20/2015	Cement	410cf	CTU @ 894	10:00	C. Lawson

Top witnessed				
Depth	Location method	Date	Time	Engineer
894	CTU C/O	11/20/2015	10:00	C. Lawson
5	Visual	11/24/2015	9:00	C. Lawson

Junk in hole:

Comments

Contractor: GPS

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
466 N. Fifth Street Coalinga, CA 93210 - 1793

PERMIT TO CONDUCT WELL OPERATIONS

No. P 515-0321

Old	New
134	--
FIELD CODE	
00	--
AREA CODE	
05	ABD
POOL CODE	

Coalinga, California
October 08, 2015

Mr. Wolf E. Regener, Agent
R&R Resources, LLC (R0177)
760 Paseo Camarillo, Suite 350
Camarillo, CA 93010

Your proposal to **(Re) Abandon** well **"Blue Agave" 1**, A.P.I. No. **019-24225**, Section **32**, T. **14S**, R. **13E**, **MD** B. & M., **Cheney Ranch Gas** field, **Any** area, **U. Cretaceous** pool, **Fresno** County, dated **9/20/2015**, received **10/5/2015** has been examined in conjunction with records filed in this office. (Lat: **36.670152** Long: **-120.585760** Datum:**83**)

*****NOTE: THIS PERMIT CONTAINS SIGNIFICANT VARIATIONS ON YOUR PROPOSAL. PLEASE READ CAREFULLY BEFORE PROCEEDING WITH WORK.*****

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
   a. Class **II2M** on the **9 5/8"** casing.
2. The well is plugged with cement from **870'** to **770'**.
3. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of **72** lbs/cu.ft and a minimum gel shear strength of **20** lbs./100 sq. ft.
4. All casing must be removed from between 5' and 10' below ground level.
5. A steel plate, at least as thick as the outer well casing and bearing the last five digits of the API number, shall be tack welded around the top circumference of the outer casing.
6. Well site restoration shall be completed within 60 days following the completion of plugging operations.
7. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Witness a test of the installed blowout prevention equipment prior to commencing **Abandonment** operations.
   b. Witness the clean-out depth at **1160'**.
   c. Witness the mudding operations.
   d. Witness the placing, location and hardness of the cement plug from **870'** to **770'**.
   e. Witness the mudding operations.
   f. Witness the placing, location and hardness of the cement plug from **30'** to **5'**.
   g. Witness the location and hardness of cement at surface, including all annular spaces.
   h. Inspect the restored well site.

NOTE:

1. The top of the hydrocarbon zone is at **7350'**±.

Steven Bohlen
State Oil and Gas Supervisor

By _____
Tim Boardman, *District Deputy*

Blanket Bond Dated: 3/30/2000
cc:

Engineer Benjamin Goldstone
Direct (559) 935-2941
Office (559) 935-2941

BG1/bg1

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

OG111 (revised 6/2011)

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

FOR DIVISION USE ONLY			
	Forms		
Bond	OGD114	OGD121	
B	CW	✓	

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ (Check one) well Blue Agave #1 , API No. 019-24225 ,

Sec. 32 , T. 14S , R. 13E , MD B.&M., Cheney Ranch Field, Fresno County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

16" 0.375" wall pipe from surface to 40 ft
9 5/8" 36# K-55 LT&C casing cemented with 260 sacks of cement from 820' to surface.
Cement plug set across fresh water: 130 sacks Class "G" cement premixed 3% CaCl2 from 1,465' to 1,160 ft. Tag witnessed by DOG and approved 10/24/02.

The total depth is: 7,753' feet. The effective depth is: 1,160 feet.

Present completion zone(s): N/A (Name) . Present zone pressure: N/A psi.

Oil or gas shows: Minor Gas -Cheney Sands 7,350- 7,510 (Name and depth) feet. Depth to base of fresh water: 1,345 feet.

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): Small gas show at 7,350 (Depth of interval) feet.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

The proposed work is as follows: (A complete program is preferred and may be attached.)

1) Move in Rig up. Install BOP.
2) Lay cement plug from 1,250' to 1,100'.
3) Pump mud from top of plug to surface
4) Set 25' cement surface plug
5) Cut off casing 5' below ground level & weld on steel cap
6) Rig down, move off
7) Clean up location

RECEIVED
OCT 05 2015
DIVISION OF OIL & GAS
COALINGA

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
R&R Resources, LLC			
Address		City/State	Zip Code
760 Paseo Camarillo, Suite 350		Camarillo	93010
Name of Person Filing Notice	Telephone Number:	Signature	Date
Wolf Regener	805-484-3613		9/20/15
Individual to contact for technical questions:	Telephone Number:	E-Mail Address:	
Wolf Regener	805-484-3613	wregener@r-rresources.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

WELL BORE SCHEMATIC

API#: 019-24225

WELL NAME: Blue Agave #1

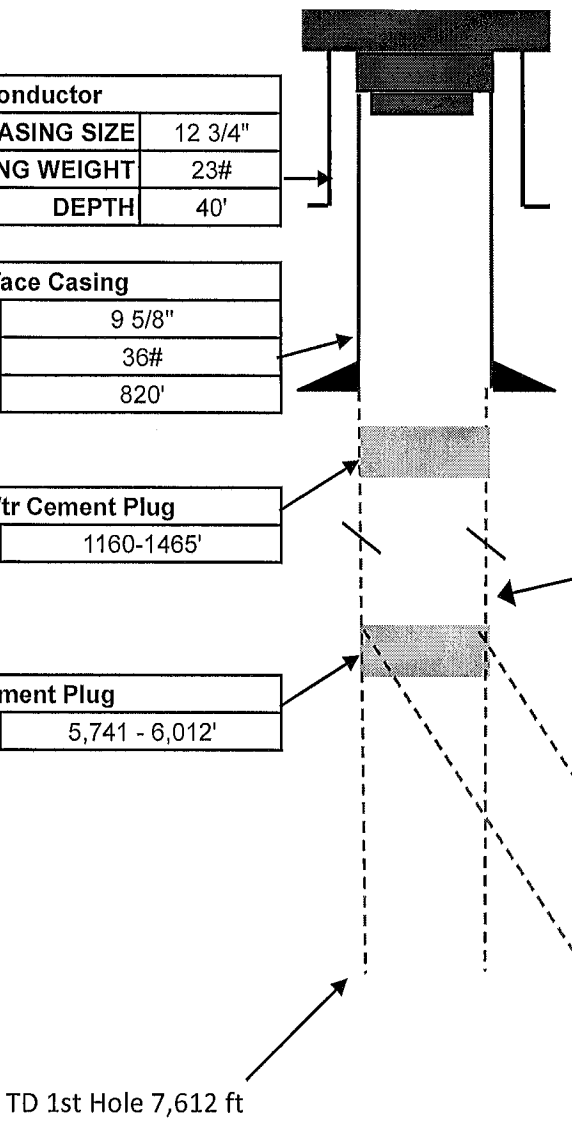
Area: Cheney Ranch
Location: Sec 32, T 14S, R13E MD B&M

Conductor	
CASING SIZE	12 3/4"
CASING WEIGHT	23#
DEPTH	40'

Surface Casing	
SIZE	9 5/8"
WEIGHT	36#
DEPTH	820'

Fresh Wtr Cement Plug	
Location	1160-1465'

Cement Plug	
Location	5,741 - 6,012'



RECEIVED
OCT 05 2015
DIVISION OF OIL & GAS
COALINGA

DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
CHECK LIST - RECORDS RECEIVED AND WELL STATUS

Company R & R Resources LLC Well No. "Blue Agave" 1

API # 019-24225 Sec. 32, T. 14S, R. 13E, M. D. B. & M.

Field Cheney Ranch Gas County Fresno

Oil ☐	Water Disposal ☐	Completed ☐
Gas ☐	Waterflood ☐	Recompleted ☐
Gas-Open to Oil Zone ☐	Steamflood ☐	Idle ☑
Drilling ☑	Fire Flood ☐	Abandoned ☐
Dry Hole ☐	Air Injection ☐	Abandoned BLM ☐
Gas Storage ☐	Gas Injection ☐	
Observation ☐	CO_2 Injection ☐	Pool Idle Drilling
Waterflood Source ☐	LPG Injection ☐	

ENGINEER'S CHECK LIST

1. Summary, History, Core & Sidewall Records L
2. Electric Logs L
3. Operator's Name L
4. Signature L
5. Well Designation L
6. Location L
7. Elevation L
8. Notices L
9. "T" Reports L
10. Casing Record L
11. Plugs L
12. Surface Inspection
13. Production
14. Directional Survey

Electric Logs

High res spectral dual spaced	2", 5"	(2)
High res Ind. Flware sonic	2"5"	(2)
Elec Micro-Imager	5"	(2)
Shiva		(2)
Mud Log		(3)

CLERICAL CHECK LIST

1. Form OGD121
2. Form OGD159 (Final Letter)
3. Form OGD159 (Final Letter - BLM)
4. Form OGD150B (Release of Bond)
5. P.I. ✓
6. EDP

Abandon Pool/Type ____/____

Date ____/____

(Conversions Only)

NOT APPROVED
Reason:

Return to: ~~Active~~ Dean

RECORDS READY FOR P.I. Yes 11-3-03 GP

APPROVED 11-3-03 GP

RELEASE BOND No Blanket

Date Eligible

(Use date last needed records were received)

Data entry

MAP AND MAP BOOK W5-2

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

WELL SUMMARY REPORT

API NO. **019-24225**

Operator	Well				
R&R Resources, LLC	**Blue Agave #1**				
Field	County	Sec.	T.	R.	B.&M.
Cheney Ranch	**Fresno**	**32**	**14S**	**13E**	**MD**

Location (Give surface location from property or section corner, street center line)
2,500.99' South and 100' East from the NW Corner of Section 32

Elevation of ground above sea level
385

California Coordinates (if known):

Was the well directionally drilled? ☒ Yes ☐ No If yes, show coordinates at total depth. **1st Hole 1404.79' North & 13.54' East, Redrill is 1307.06' North and 730.7' West.**

Commenced drilling (date)
9/28/02

Completed drilling (date)
10/24/02

Commenced production/injection (date)
N/A

Production mode: ☐ Flowing ☐ Pumping ☐ Gas lift

Name of production/injection zone(s)
N/A

Total depth (1st hole)	(2nd)	(3rd)
7612'	**7753'**	

Present effective depth **1,160'**

Junk

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing

Which is **12** feet above ground

GEOLOGICAL MARKERS — DEPTH

RECEIVED
OCT 01 2003
DIVISION OF OIL & GAS
COALINGA

Formation and age at total depth
Cheney Sands, Upper Cretaceous

Base of fresh water
1,345'

	Clean Oil (bbl per day)	API Gravity (clean oil)	Percent Water (including emulsion)	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	N/A					
Production After 30 days	N/A					

CASING AND CEMENTING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New (N) or Used (U)	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)	Top(s) of Cement in Annulus
16"	Surface	40'		0.375" wall pipe	Used				Surface
9 5/8"	Surface	820'	36#	K-55 LT&C	New	12 1/4"	260 sacks	820	Surface

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforations, and method.)
N/A

Logs/surveys run? ☒ Yes ☐ No If yes, list type(s) and depth(s).
HRI, Sonic, EMI 7590' to 820', Shiva 7,600' to 6,050' in 1st Hole
HRI/Density/Neutron 7707' to 5485' in redrill.

In compliance with Sec. 3215, Division 3, of the *Public Resources Code*, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
R&R Resources, LLC	**Agent**	
Address	City/State	Zip Code
601 Daily Drive, Suite 210	**Camarillo, California**	**93010**
Telephone Number	Signature	Date
805-484-9648		**1/12/03**

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

REPORT OF CORRECTION OR CANCELLATION

Mr. Wolf E. Regener
R & R Resources LLC
601 Daily Drive Suite 215
Camarillo, CA 93010

Coalinga, California
November 3, 2003

In accordance with the summary dated 1/12/2003

the following change pertaining to your well "Blue Agave" 1

API 019-24225 , Cheney Ranch Gas field Fresno County,

Sec. 32 , T 14S , R 13E , M.D. B. & M., is being made to our records:

[X] The corrected location is:
Fr NW cor 2501' S 100' E

[ ] The corrected elevation is _____

[ ] Report No _____ , dated _____ , has been corrected as follows:

_____

_____

[ ] Your notice to _____ received _____ , and our report No. P _____ issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have an individual bond on file covering this notice, it will be returned. No request for such return is necessary.

[ ] Other:

_____

_____

Clifford E. Parli

Clifford E. Parli

Energy & Mineral Resources Engineer

OG165

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

RECEIVED
OCT 01 2003
DIVISION OF OIL & GAS
COALINGA

Operator R&R Resources, LLC Field Cheney Ranch County Fresno
Well Blue Agave #1 Section 32 ,T 14S, R 13E, MDB&M
API No 019-24225 Name Wolf E. Regener Title: Agent
Date January 12, 2003. Page 1

Signature _____

601 Daily Drive, Suite 210, Camarillo, California 93010 (805) 484-9648

8/22/02 Staked location 2,500.99' South and 100 East from the NW Corner of Section 32, T14S, R13E, MDB&M, elevation 385'.

9/13/02 Built the location, dug the drilling sump, set 40' of 16" conductor pipe, cemented in place, set an 8' cellar and drilled the rat and mouse holes.

9/26/02 Loading out rig and moving in on location.

9/28/02 Rigged up Caza rig 514. Take on water, weld pitcher nipple and mix spud mud. Rig on books as of 1 o'clock. Drilled to 573, circulated and wiped to bit. Drilled to 820', circulated bottoms up, wiped hole to bit, ran in hole, circulated bottoms up and pulled out for casing.

9/29/02 Laid down collars and bit. Rigged up casing tongs and ran 9 5/8" casing at 820', ran 18 joints 36# K55 LT&C, including guide shoe and insert. Rigged up Halliburton and cemented casing with 165 sacks class G, premixed 6% gel, 2% cacl2, followed by 95 sacks class G, premixed 2% cacl2, dropped plug, good returns, bumped plug, in place at 11:57 AM. Waited on cement. Cut off conductor and Casing, dressed and welded casing head. Tested head to 2000 ok. Rigged up Halliburton for top cement job, with 100 sacks class G cement, premixed 2% cacl2. Cement in place at 5:50 PM. Rig down cementers. Nippled up BOP and function tested rams, ok. Made up BHA and ran in hole to 760. Tested BOP for DOG, approved.

9/30/02 Finished testing for DOG. Drilled out insert and shoe, circulated and conditioned hole. Drilled to 900', circulated and pulled out of hole, picked up directional tools and made up BHA. Oriented MWD and ran in hole. Drilled to 1,352', circulated and pulled out of hole for jars. Picked up Jars, Jars defective. Layed down jars, check MWD, didn't work, fixed. Drilled to 1,710', circulated and wiped hole to shoe, free. Drilled to 1765'

10/1/02 Drill to 2,150', Wipe hole 10 stands, free. Drill to 2622, circulate and wipe hole to shoe. Free. Drill to 2627, Circulate and pull out of hole for new BHA. Lay down mud motor. Pickup tools and make up lock up assembly. Run in hole. Ream from 2535 to 2627. Drill to 2835.

10/2/02 Drill to 3,139. Circulate and pull out of hole for MWD failure. Change out MWD and run in hole. Drill to 3416', Circulate and wipe hole 10 stands. (50K spot drag). Drill to 3542', circulate pull out of hole for MWD failure. Lay down MWD, install Totco ring and run in hole. Drill to 3,740.

10/3/02 Drill to 3,820. Circulate and wipe hole 10 stands, 45,000 spot drag. Drill to 4,038, circulate and wipe hole 10 stands (35,000# spot drag). Drill to 4,287', Circulate and wipe hole 10 stands (20 to 50K over from 3942 to 4200). Drill to 4505. Circulate and survey to 4505'. Drill to 4,785. Circulate and pull out of hole for new BHA.

10/4/02 Circulate and clean hole. Pull out of hole. Work tite hole from 3562 to 3431', Condition mud. Pull out of hole. Lay down collars and stabs and change bit. Pickup new BHA. Run in hole. Ream from 3540 to 3875'. Run in hole to 4211. Ream to 4785. Drill to 4955, wipe hole to 3838 (120,000# over) Drill to 5109..

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

RECEIVED
OCT 01 2003
DIVISION OF OIL & GAS
COALINGA

Operator R&R Resources, LLC Field Cheney Ranch County Fresno
Well Blue Agave #1 Section 32 ,T 14S, R 13E, MDB&M
API No 019-24225 Name Wolf E. Regener Title: Agent
Date January 12, 2003.

10/5/02 Circulate and clean hole, wipe to 4,492' (50K spot drag) Drill to 5,295', circ and survey 5295'. Pull out of hole. Work tite hole (50 to 100K over) Condition mud and bring mud weight up. Ream 4870 to 5295. Condition mud and bring mud weight up. Wipe hole to shoe. Slip and cut drill line. Run in hole. Ream 5235 to 5295'. Drill to 5,358'.

10/6/02 Drill to 5,360'. Circulate and wipe hole 10 stands. (30K spot drag) Drill to 5453. Pull out of hole, work through tite spot from 5480 to 5280, (120,000# over). Con't pulling out of hole. Look for washout. None. Slip and cut drill line. Make up bit with 14, 2x13's, jets. Run in hole to 5,260'. Ream 5,260 to 5453'. Drill to 5,544'. Depth midnight 5500'. Circulate and wipe hole 10 stands (30-40K spot drag) Drill to 5,668'.

10/7/02 Circulate and wipe hole (free). Drill to 5,792'. Circulate and survey 5792'. Wipe hole 10 stands (tite 5751' – 5472). Drill to 5885'. Circulate and wipe hole. 2nd and 3rd stands pulled 50-100K over. Work tite hole and pull out of hole. Change jets to 3 x 15's. Run in hole. No drag and no fill. Drill to 5915'.

10/8/02 Drill to 5,975'. Circulate and wipe hole. 2nd and 3rd stands pulled 10-16K over. Drill to 6,069'. Wipe hole 10 stands (10-20K spot drag). Drill to 6,160' Circulate and wipe hole (20-40K spot drag) Drill to 6,246'. Circulate and wipe hole 10 stands (40K spot drag). Drill to 6,316'. Circulate and survey @6316'.

10/9/02 Survey at 6,316'. Pull out of hole. Lay down Bottom hole assembly and pick up new PDC bit and bottom hole assembly. Run in hole. Drill to 6,379. Circulate and wipe hole 10 stands, free. Drill to 6504', Circulate and wipe hole 10 stands, free. Drill to 6645. Circulate and survey, 1st survey no good. Rerun survey. Wipe hole 10 stands, free. Drill to 6657'.

10/10/02 Drill to 6901'. Circulate and wipe hole. 10 stands (10-30K spot drag. Drill to 7090'. Circulate and survey @ 7090'. Wipe hole 10 mstds (10-30K spot drag). Drill to 7352'. Circulate bottoms up. Pull out of hole to shoe. Run in hole. Drill to 7552'.

10/11/02 Drill to 7612'. Circulate and wipe hole. 15 stands (10-20K spot drag. Circulate and survey @ 7612'. Pull out of hole F/logs. Run Halliburton HRI/Sonic/EMI. Run in hole to 6000'.

10/12/02 Run in hole open ended to 6012'. Circulate and condition mud. Rig up Halliburton cementers and pump 120 sacks, west coast Premium Hi Temp cement, kick off plug @6012. estimated top of cement 5712'. Pull out of hole to 5600'. Circulate pipe clear and rig down cementers. Wait on cement and circulate. Run in hole and tag top of cement at 5741' with 10,000 #'s. Pull out of hole. Service Rig. Measure and make up directional tools. Run in hole to shoe and test MWD. Ok. Run in hole. Prepare to drill of plug directionally.

10/13/02 Run in hole to 5,017'. Ream to 5080'. Run in hole to 5,330. Ream to 5,395'. Run in hole to 5741'. Circulate and condition. Test MWD. OK Drilling to 5773'. MWD failed. Pipe screen filling halfway on connection. Suspend operations. Notify CAZA of same and call Troy Azlin. Pull out of hole and lay down MWD. Photograph MWD and cleanout of pit operation. Dump and clean mud pits. Repair holes and split in shaker/suction pit divider. Make up MWD. Test MWD. Ok. Run in hole to 2000'. Cir 5 minutes. Handful of debris in pipe screen. Probably from clearing lines. Will stop at 4000' and repeat process.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

Operator R&R Resources, LLC Field Cheney Ranch County Fresno
Well Blue Agave #1 Section 32 ,T 14S, R 13E, MDB&M
API No 019-24225 Name Wolf E. Regener Title: Agent
Date January 12, 2003.

10/14/02 Run in hole to 3995'. Break circulation and test MWD. OK. Run in hole to 5773'. Circulate and condition. Test MWD. OK. Drill to 5897'. Wipe hole to 5440', free. Drill to 5987'. Wipe hole to 5660'. (free) Drill to 6081', wipe hole to 5789 (free)

10/15/02 Drill to 6173'. Circulate and wipe 10 stands (free). Drill to 6204'. Circulate and pull out of hole for PDC bit. Slip and cut drill line 100'. Lay down bit and break UBHO sub, service MWD. Make up bit and MWD, run in hole to shoe and test MWD. OK. Run in hole. Drill to 6242'.

10/16/02 Drill to 6300'. Circulate and wipe 10 stands (free). Drill to 6486'. Circulate and wipe 10 stands (free). Drill to 6670'. Circulate and wipe 10 stands (free). Drill to 6750'.

10/17/02 Drill to 6825'. Circulate and pull out of hole for new MM and bit. Having problems orienting the PDC in sandstone. Lay down mud motor and bit. Service MWD and measure and pick up additional monel collar. Run in hole, test MWD. OK. Run in hole. Drill to 6948' (Depth midnight 6888'). Circulate and wipe 10 stands (free). Drill to 6979'.

10/18/02 Drill to 7071'. MWD not working. Drill pipe screen full of metal pieced. Pull out of hole for MWD service. Service MWD. Run in hole. Ream tite spot at 5377'. Run in hole. Circulate bottoms up. Drill to 7081'. Pull out of hole. Check bit. OK. No scoring, cones and teeth in good shape. Motor seems fine. Lay down mud motor. New one on location. Decided to run it. Pick up mud motor and test. OK. Make up new BHA and orient MWD.

10/21/02 Continue to ream to 7412'. Drill o 7753'. Pull out of hole. Work thru tite spot 1-3 stands. Lay down PDC & NB stab. Pick up FDS+bit. Run in hole. Circulate bottoms up. Wipe hole 20 stands (free). Circulate bottoms up. Pull out of hole from logs.

10/22/02 Pull out of hole from logs. Rig up Halliburton with triple combo. Tool stuck at 1835'. Work tool. Order out Weatherford fishing tool crew. Wait on fishing tools. R/U fishing tool and run in hole to fish. Tag fish and latch on. Pull out of hole with fish (chain out of hole). Lay down fish and fishing tools. Slip and cut drill line and service rig. Make up bottom hole assembly and run in hole to circulate and condition hole from logs.

10/23/02 Run in hole and circulate and condition hole from logs. Pull out of hole from logs. Rig up Halliburton loggers and run elogs. Rig down loggers. Services rig. Run in hole to 6248'. Rig up lay down equipment and lay down drill pipe.

10/24/02 Run in hole open-ended to 1465'. Circulate for cement. Rig up Halliburton cementers and Equalize 130 sx Class "G" cement premixed 3% CaC12 at 1465'. CIP at 7:50 a.m. base of fresh water plug. Waiting on cement. Run in hole and tag top of cement at 1160'. D.O. G. witnessed and approved. Lay down drill pipe, Lay down collars. Nipple down blow out preventers, dump and clean mud pits. Release rig. Suspend well.

RECEIVED
OCT 01 2003
DIVISION OF OIL & GAS
COALINGA

OH

Job Number: 092902
Company: R&R RESOURCES LLC
Lease/Well: BLUE AGAVE #1
Location: CHENEY RANCH
Rig Name: CAZA #14
RKB:
G.L. or M.S.L.:

State/Country: CALIF\USA
Declination: 15*
Grid:
File name: C:\WINSERVE\R&R.SVY
Date/Time: 10-Oct-02 / 12:03
Curve Name:

RECEIVED
OCT 01 2003
DIVISION OF OIL & GAS
COALINGA

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 1.93
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
810.00	.20	306.40	810.00	.84	-1.14	.80	1.41	306.40	.02
980.00	.60	335.50	979.99	1.82	-1.75	1.77	2.53	316.27	.26
1137.00	2.60	.60	1136.93	6.13	-2.05	6.06	6.47	341.53	1.32
1289.00	6.70	356.30	1288.39	18.44	-2.59	18.34	18.62	352.02	2.71
1320.00	7.90	359.00	1319.14	22.37	-2.74	22.27	22.54	353.02	4.03
1353.00	9.60	2.30	1351.76	27.39	-2.67	27.28	27.52	354.43	5.37
1414.00	12.10	6.70	1411.66	38.82	-1.72	38.74	38.86	357.47	4.31
1474.00	13.90	2.20	1470.12	52.27	-.71	52.22	52.28	359.22	3.44
1569.00	15.00	2.00	1562.12	75.96	.16	75.92	75.96	.12	1.16
1659.00	15.00	2.20	1649.05	99.24	1.01	99.22	99.24	.58	.06
1781.00	17.00	2.10	1766.32	132.84	2.27	132.84	132.86	.98	1.64
1935.00	16.00	.80	1913.98	176.56	3.39	176.58	176.59	1.10	.69
2089.00	15.30	2.30	2062.27	218.09	4.51	218.11	218.13	1.18	.52
2214.00	16.30	1.60	2182.54	252.10	5.66	252.15	252.16	1.29	.81
2276.00	14.90	2.30	2242.26	268.76	6.22	268.82	268.83	1.33	2.28
2528.00	14.60	1.90	2485.95	332.88	8.57	332.98	332.99	1.48	.13
2700.00	15.00	2.20	2652.25	376.79	10.15	376.92	376.92	1.54	.24
2810.00	15.40	2.80	2758.40	405.60	11.41	405.75	405.76	1.61	.39
3109.00	14.60	5.90	3047.21	482.74	17.22	483.05	483.05	2.04	.38
3232.00	14.70	5.50	3166.21	513.70	20.31	514.09	514.10	2.26	.12
3416.00	14.40	6.40	3344.31	559.67	25.10	560.20	560.23	2.57	.20
4500.00	6.20	358.00	4409.98	752.46	38.10	753.31	753.42	2.90	.77

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
5295.00	9.50	357.00	5197.43	860.91	33.17	861.54	861.55	2.21	.42
5792.00	14.50	359.00	5683.41	964.14	29.93	964.60	964.61	1.78	1.01
6379.00	22.00	1.00	6240.49	1147.81	30.57	1148.19	1148.22	1.53	1.28
6645.00	16.00	358.00	6491.89	1234.35	30.16	1234.66	1234.71	1.40	2.28
7079.00	10.00	355.00	6914.58	1331.75	24.78	1331.83	1331.98	1.07	1.39
7612.00	6.00	345.00	7442.31	1404.79	13.54	1404.45	1404.86	.55	.79

RECEIVED
OCT 01 2003
DIVISION OF OIL & GAS
COALINGA

File: C:\WINSERVE\R&R.SVY

RD

Job Number: 692962
Company: R&R RESOURCES LLC.
Lease/Well: BLUE AGAVE #1
Location: CHENEY RANCH
Rig Name: #14
RKB:
G.L. or M.S.L.:

State/Country: CALIF/USA
Declination: 15°
Grid:
File name: C:\WINSERVE\RR1.SVY
Date/Time: 18-Oct-02 / 21:57
Curve Name:

CONTROLLED DIRECTIONAL, INC.
PO BOX 534 RIO VISTA, CA 94571
707-374-4001 FAX 707-374-4003

PLUG @ 1160'

RECEIVED
OCT 01 2003
DIVISION OF OIL & GAS
COALINGA

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 270.00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
810.00	.20	306.40	810.00	.84	-1.14	1.14	1.41	306.40	.02
980.00	.60	335.50	979.99	1.82	-1.75	1.75	2.53	316.27	.26
1137.00	2.60	.60	1136.93	6.13	-2.05	2.05	6.47	341.53	1.32
1289.00	6.70	356.30	1288.39	18.44	-2.59	2.59	18.62	352.02	2.71
1320.00	7.90	359.00	1319.14	22.37	-2.74	2.74	22.54	353.02	4.03
1353.00	9.60	2.30	1351.76	27.39	-2.67	2.67	27.52	354.43	5.37
1414.00	12.10	6.70	1411.66	38.82	-1.72	1.72	38.86	357.47	4.31
1474.00	13.90	2.20	1470.12	52.27	-.71	.71	52.28	359.22	3.44
1569.00	15.00	2.00	1562.12	75.96	.16	-.16	75.96	.12	1.16
1650.00	15.00	2.20	1649.05	99.24	1.01	-1.01	99.24	.58	.06
1781.00	17.00	2.10	1766.32	132.84	2.27	-2.27	132.86	.98	1.64
1935.00	16.00	.80	1913.98	176.56	3.39	-3.39	176.59	1.10	.69
2089.00	15.30	2.30	2062.27	218.09	4.51	-4.51	218.13	1.18	.52
2214.00	16.30	1.60	2182.54	252.10	5.66	-5.66	252.16	1.29	.81
2276.00	14.90	2.30	2242.26	268.76	6.22	-6.22	268.83	1.33	2.28
2528.00	14.60	1.90	2485.95	332.68	8.57	-8.57	332.99	1.48	.13
2700.00	15.00	2.20	2652.25	376.79	10.15	-10.15	376.92	1.54	.24
2810.00	15.40	2.80	2758.40	405.60	11.41	-11.41	405.76	1.61	.39
3109.00	14.60	5.90	3047.21	482.74	17.22	-17.22	483.05	2.04	.38

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
3232.00	14.70	5.50	3186.21	513.70	20.31	-20.31	514.10	2.26	.12
3416.00	14.40	6.40	3344.31	559.67	25.10	-25.10	560.23	2.57	.20
4500.00	6.20	358.00	4409.98	752.46	38.10	-38.10	753.42	2.90	.77
5295.00	9.50	357.00	5197.43	860.91	33.17	-33.17	861.55	2.21	.42
5820.00	15.90	356.70	5709.32	976.09	26.75	-26.75	976.46	1.57	1.22
5690.00	17.20	352.70	5776.42	995.93	24.89	-24.89	996.24	1.43	2.47
5924.00	17.00	347.80	5808.91	1005.77	23.20	-23.20	1006.04	1.32	4.28
5954.00	17.60	346.20	5837.56	1014.47	21.19	-21.19	1014.69	1.20	2.55
6050.00	18.00	343.10	5928.96	1042.75	13.42	-13.42	1042.84	.74	1.07
6080.00	19.00	341.30	5957.41	1051.81	10.50	-10.50	1051.87	.57	3.84
6110.00	19.80	340.70	5985.71	1061.24	7.26	-7.26	1061.26	.39	2.75
6182.00	18.30	337.60	6053.77	1083.20	-1.08	1.08	1083.20	359.94	2.51
6274.00	19.10	330.20	6140.92	1109.62	-14.07	14.07	1109.71	359.27	2.72
6364.00	20.80	325.60	6225.52	1135.58	-30.42	30.42	1135.99	358.47	2.57
6517.00	22.40	313.60	6367.84	1178.13	-66.90	66.90	1180.02	356.75	3.06
6665.00	24.50	301.00	6503.70	1213.40	-113.66	113.66	1218.72	354.85	3.66
6756.00	26.60	302.00	6585.80	1233.92	-147.11	147.11	1242.66	353.20	2.36
6846.00	27.50	296.00	6665.97	1253.71	-182.88	182.88	1266.98	351.70	3.19
6910.00	28.40	290.80	6722.51	1265.60	-210.39	210.39	1282.96	350.56	4.06
7003.00	28.90	287.10	6804.13	1280.06	-252.55	252.55	1304.73	348.84	1.98
7041.00	30.10	285.00	6837.20	1285.22	-270.53	270.53	1313.39	348.11	4.17
7213.00	35.30	279.20	6981.93	1304.35	-361.34	361.34	1353.47	344.52	3.53
7243.00	36.40	278.00	7006.24	1306.98	-378.71	378.71	1360.74	343.84	4.35
7280.00	38.40	278.10	7035.64	1310.12	-400.96	400.96	1370.11	342.98	5.41
7310.00	40.00	275.20	7058.89	1312.31	-419.79	419.79	1377.82	342.26	8.11
7413.00	40.80	268.30	7137.36	1314.31	-486.43	486.43	1401.44	339.69	4.41
7787.00	40.80	268.30	7420.48	1307.06	-730.70	730.70	1497.44	330.79	.00

374

283

RECEIVED
OCT 01 2003
DIVISION OF OIL & GAS
COALINGA

T/Chevy 7541 TVD 7234' 570' west 1310' north -6836 95' high to SHF

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS &
GEOTHERMAL RESOURCES
466 North Fifth Street
Coalinga, CA 93210

No. **T502-232**

REPORT ON OPERATIONS

Wolf E. Regener
R & R Resources LLC
601 Daily Drive, Suite 210
Camarillo, CA 93010

Coalinga, California
December 17, 2002

Your operations at Well **"Blue Agave" 1** A.P.I. No. **019-24225** Section **32**, T.14S, R.13E, **M. D. B. & M.**, **Cheney Ranch Gas** field, in **Fresno** County, were witnessed on **10/23/2002. Timothy S. Boardman**, representative of the Supervisor, was present from **1200** to **1230**. Also present was **Bob Walton - Geologist.**

Present condition of well: **16" cem 50'; 9 5/8" cem 820' TD 7753 (Present Hole) Plugged w/cem 1465'-1160**

The operations were performed for the purpose of plugging back for redrill & suspension.

DECISION: **The location and hardness of the cement plug @ 1160' is approved.**

DEFICIENCIES: **NONE**

CONTRACTOR: **Caza Drilling**

TSB/do

KENNETH P. HENDERSON,
ACTING STATE OIL AND GAS SUPERVISOR

By _____
TIMOTHY S. BOARDMAN,
Deputy Supervisor

OG109

T-232

Form OGD10 (6/80)

DIVISION OF OIL AND GAS
Cementing/Plugging Memo

Operator R&R Resources Well No. "Blue Agave" 1
API No. 019-24225 Sec. 32, T. 14S, R. 13E, M.D. B&M
Field Cheney Ranch Gas, County Fresno. On Oct 23, 2002,
Mr. T.S. Boardman, representative of the supervisor was present from 1200 to 1230.
There were also present Bob Walton Geologist
Casing record of well: 16" cem 50'; 9 5/8" cem 820' TD 7753' (present hole) Plugged w/ cem 1465'-1160'

The operations were performed for the purpose of plugging back for redrill & suspension

☐ The plugging/cementing operations as witnessed and reported are approved.
☒ The location and hardness of the cement plug @ 1160' is approved.

Hole size:_____" fr._____' to_____', _____" to_____' & _____" to_____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Casing/tubing recovered:_____" shot/cut at_____', _____', _____' pulled fr._____';
_____" shot/cut at_____', _____', _____' pulled fr._____'.

Junk (in hole):_____

Hole fluid (bailed to) at_____'. Witnessed by_____

Mudding	Date	Bbls.	Displaced	Poured	Fill	Engr.

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
10-23-02	130 SX	DPC 1465'	0750	Rptd by Bob Walton	1160'	10,000#	10-23-02 1212pm	T.S. Boardman

1st hole TD 7612' on 10/10/2002 Plug Back TD 5585' 2nd hole TD 7753' on 10/22/2002

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS &
GEOTHERMAL RESOURCES
466 North Fifth Street
Coalinga, CA 93210

No. **T502-169**

REPORT ON OPERATIONS

Wolf E. Regener
R & R RESOURCES LLC
601 Daily Drive, Suite 210
Camarillo, CA 93010

Coalinga, California
October 7, 2002

Your operations at Well **"Blue Agave"1** **A.P.I.** No. **019-24225** Section **32**, T.**14S**, R.**13E**, M.D.B. & M., in **Cheney Ranch Gas** field, **Fresno** County, were witnessed on **09/29/2002**. **Cliff Parli**, representative of the Supervisor, was present from **0536** to **0642**.

Present condition of well: **16" cem 50'; 9 5/8"cem 820' insert 779'. T.D. 820' (standing cemented)**

The operations were performed to test the blowout prevention equipment and installation.

DECISION: **The blowout prevention equipment and it's installation on the 9 5/8" casing are approved.**

DEFICIENCIED CORRECTED : **Internal preventer not on rig floor.**

CONTRACTOR: **Caza Drilling**

CP/do

KENNETH P. HENDERSON
ACTING STATE OIL AND GAS SUPERVISOR

By _____
TIMOTHY S. BOARDMAN,
Deputy Supervisor

OG109

RB

API No. 019-24225

DIVISION OF OIL AND GAS

T T-169

BLOWOUT PREVENTION EQUIPMENT MEMO

Operator R&R Resources LLC Well "Blue Agave" 1

Field Eheney Ranch gas County Fresno Spud Date

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	9-29-02	C. Parli	(0536 to 0642)	Richard George	Drilling foreman
2nd			(to)		

Contractor Caza Drilling Rig # Contractor's Rep. & Title

Casing record of well: 16" Cem 50'; 9 5/8" Cem. 820' insert 779 T.D. 820' (standing cemented)

OPERATION: Testing ~~(inspecting)~~ the blowout prevention equipment and installation.

DECISION: The blowout prevention equipment and its installation on the 9 5/8 " casing are approved.

Proposed Well Opns: . MACP: psi

Hole size: 12¼ " fr. 0 ' to 820 ' 8 3/4 " to ' & " to '

REQUIRED BOPE CLASS: III B 3M

CASING RECORD OF BOPE ANCHOR STRING					Cement Details	Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at		Casing	Annulus
9 5/8	40	K-55	820		165 sx "G" 6% Gel 2% CaCl2	returns	
					100 sx "G"		

BOP STACK							TEST DATA						
API Symb.	Ram Size (in.)	Manufacturer	Model or Type	Vert. Bore Size (in.)	Press. Rtg.	Date Last Overhaul	Gal. to Close	Recovery Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.
A	-	Hydril	GK	10	3000							9-29	1000
P	4	Shaffer	RD	10	3000							9-29	1000
B			"	10	3000							9-29	1000

ACTUATING SYSTEM

Accumulator Unit(s) Working Pressure 3000 psi

Total Rated Pump Output gpm

Distance From Well Bore 70 ft.

	Accum. Manufacturer	Capacity		Precharge	
1	Koomey	80	gal.	1000	psi
2			gal.		psi

CONTROL STATIONS	Elec.	Hyd.	Pneu.
✓ Manifold at accumulator unit		✓	
✓ Remote at Driller's station	✓		
Other:			

EMERG. BACKUP SYSTEM			Press.	Wkg. Fluid
✓ N_2 Cylinders	1	L= "	2600	gal.
Other:	2	L= "	2700	gal.
	3	L= "	2800	gal.
	4	L= "		gal.
	5	L= "		gal.
	6	L= "		gal.
		TOTAL:		gal.

TOTAL:

AUXILIARY EQUIPMENT

	No.	Size (in.)	Rated Press.	Connections: Weld	Flange	Thread	Test Press.
✓ Fill-up Line							
✓ Kill Line		3	3000		✓	✓	1000
✓ Control Valve(s)	1		3000		✓		1000
✓ Check Valve(s)	1		3000		✓		1000
✓ Aux. Pump Connect.			3000		✓		1000
✓ Choke Line		3	3000		✓	✓	1000
✓ Control Valve(s)	2		3000		✓		1000
✓ Pressure Gauge					✓		
✓ Adjustable Choke(s)	2	3	3000		✓		1000
✓ Bleed Line		3			✓	✓	
✓ Upper Kelly Cock							1000
✓ Lower Kelly Cock		4	3000				1000
✓ Standpipe Valve							1000
✓ Standpipe Press. Gauge							
✓ Pipe Safety Valve		4	3000				—
✓ Internal Preventer		4	3000				—

HOLE FLUID MONITORING EQUIPMENT	Alarm Type: Audible	Visual	Class
✓ Calibrated Mud Pit		✓	A
✓ Pit Level Indicator		✓	B
✓ Pump Stroke Counter	✓	✓	
✓ Pit Level Recorder		✓	
✓ Flow Sensor	✓	✓	C
✓ Mud Totalizer		✓	
Calibrated Trip Tank			
Other:			

Hole Fluid Type	Weight	Storage Pits (Type & Size)

REMARKS AND DEFICIENCIES:

1) Internal preventer Not on rig floor.

OGD9 (8/92/GSR1/3M)

DEPARTMENT OF CONSERVATION
STATE OF CALIFORNIA

DIVISION OF OIL, GAS, & GEOTHERMAL RESOURCES

466 N. FIFTH STREET
COALINGA
CALIFORNIA
93210-1793

PHONE
559/935-2941

FAX
559/935-5154

INTERNET
consrv.ca.gov

GRAY DAVIS
GOVERNOR

September 24, 2002

Wolf E. Regener
R&R Resources LLC
601 Dailey Drive, Suite 210
Camarillo, CA 93010

RE: Request of confidential status for well "Blue Agave" 1 Section 32 T14S, R13E, M.D.B.&M. Cheney Ranch Gas field, Fresno County

I have reviewed your request for confidential status for well "Blue Agave" 1. The proposed well is located in a designated gas field, the proposed completion zone is the Cheney Sands at 7400 feet. This appears to be the same strata as the Jergins sands (Cretaceous) found elsewhere in the field.

Lacking further evidence of new fault block or other new accumulation I cannot grant full confidential status. However I will grant confidential status for 60 days until you can provide further evidence to the contrary.

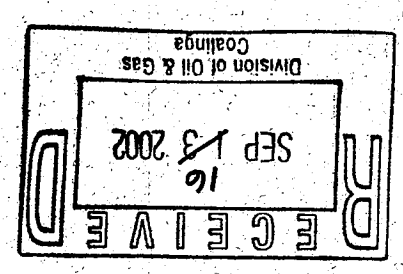
Sincerely

Timothy S. Boardman
District Deputy

cc:Well File

R & R Resources, LLC

September 12, 2002



Division of Oil and Gas
466 N. Fifth Street
Coalinga, California 93210

Blue Agave #1
Fresno County California

Dear Ladies and/or Gentlemen:

This letter is to request confidential status for the Blue Agave #1, API #019-24225.

If you need anything else please let me know. Thank you for your help with this..

Sincerely,

Wolf E. Regener
President

WER NSP
Enclosures

601 Daily Drive, Suite 210
Camarillo, California 93010 805-484-9648

283

R URCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS &
GEOTHERMAL RESOURCES
466 North Fifth Street
Coalinga, CA 93210

No.	P502-281
Field Code	134
Area Code	00
New Pool Code	05
Old Pool Code	New Well

PERMIT TO CONDUCT WELL OPERATIONS

Wolf E. Regener
R & R Resources LLC
601 Daily Drive, Suite 210
Camarillo, CA 93010

Coalinga, California
August 19, 2002

Your proposal to **Drill** well **"Blue Agave" 1, A.P.I.** No. **019-24225** Section **32**, T. **14** S., R**13** E., M.D. B. & M., **Cheney Ranch Gas** field, **U.Cretaceous** pool, **Fresno** County, dated **08/13/2002**, received **08/16/2002** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Drilling fluid of sufficient quality and quantity to prevent blowouts shall be used in drilling, and the column of drilling fluid shall be maintained to the surface at all times, particularly while pulling the drill pipe.
2. Blowout prevention equipment conforming to CDOGGR Class III B3M requirements is installed on the 9 5/8" casing and maintained ready for use at all times.
3. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet.
4. Fresh water deposits are to be protected by cement behind the 5 ½" casing. Sufficient cement must be used to fill to at least 100 feet above the base of the fresh water deposits, which is estimated to be at 1450'. If cementing through ports set them between 50 and 100 feet below the base of the fresh water deposits and use sufficient cement to fill 300 feet or more of casing/hole annulus.
5. THIS DIVISION SHALL BE NOTIFIED:
   a) To witness a test of the installed blowout prevention equipment prior to drilling out of the 9 5/8" casing.
   b) To witness a production test demonstrating water shut-off within 30 days of completion.

NOTE: The base of the usable fresh water should be encountered near 1450.

Blanket Bond
GP/do

Engineer: Gary Philbrick
Phone:(559) 935-2941

WILLIAM F. GUERARD, JR.,
STATE OIL AND GAS SUPERVISOR

By _____

Timothy S. Boardman
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.
Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

NOTICE OF INTENTION TO DRILL NEW WELL

RECEIVED
AUG 16 2002
Division of Oil & Gas
Coalinga

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS ____	NEG. DEC. ☐ S.C.H. NO. ____	E.I.R. ☐ S.C.H. NO. ____	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☒
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
W5-2	9/16/02		B	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well Blue Agave #1, well type Gas, API No. 019-24225 (Assigned by Division),

Sec. 32, T. 14S, R. 13E, MDB.&M., Cheney Ranch Gas Field, Fresno County.

Legal description of mineral-right lease, consisting of 320 acres (attach map or plat to scale), is as follows:
West Half of Section 32

Do mineral and surface leases coincide? Yes ☒ No ☐. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2,600 feet South (Direction) along section ☒ / property ☐ (Check one) line and 100 feet East (Direction)

at right angles to said line from the NW corner of section ☒ / property ☐ (Check one) 32 or

Is this a critical well according to the definition on the next page of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) and true vertical depth at total drilled depth: 1,500 feet North (Direction) and 50 feet East (Direction) Estimated true vertical depth 7,200. Elevation of ground above sea level 385 feet. All depth measurements taken from top of KB (Derrick Floor, Rotary Table, or Kelly Bushing) that is 15 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
9 5/8"	36#	K-55 ST&C	Surface	800'	800'	800 + 20% excess
5 1/2"	17#	N-80 LT&C	Surface	7,400	7,400	1,800' w/20% excess

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Cheney Sands (Name, depth, and expected pressure) Estimated total depth 7,400 (Feet)

Cheney Sands, 7,100, 3,100 psi

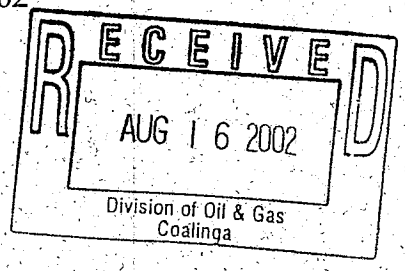
It is understood that if changes to this plan become necessary, we are to notify you immediately.

Name of Operator		Type of Organization (Corporation, Partnership, Individual, etc.)	
R&R Resources, LLC		Limited Liability Company	
Address		City	Zip Code
601 Daily Drive, Suite 210		Camarillo	93010
Telephone Number	Name of Person Filing Notice	Signature	Date
805-484-9648	Wolf E. Regener		8/13/02

This notice and an indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled

R & R Resources, LLC

August 14, 2002



Overnight Express

Division of Oil and Gas
466 N. Fifth Street
Coalinga, California 93210

Blue Agave #1 well
Fresno County California

Dear Ladies and/or Gentlemen:

Enclosed are two originals of the Notice of Intent to drill the Blue Agave #1 well. If you need anything else please give us a call.

Sincerely,

Wolf E. Regener
President

WER NSP
Enclosures

601 Daily Drive, Suite 210
Camarillo, California 93010 805-484-9648