Illinois State Geological Survey



Digital Well Database Output Format for Oil & Gas Wells

Header Information: This list contains location and identification information that is usually entered from the original permit. Other items included are entered from many sources including the completion report, plugging affidavit and scout tickets. Currently there are over 195,000 Oil & Gas well records in this ISGS database.

Item Name	Item Description	Item Format
API_NUMBER	12 digit number assigned by the ISGS Consists of"12" - state code /three digit county code/5 digit unique number/2 digit re-drill code	CHAR(12)
LATITUDE	Latitude, decimal degrees, NAD83	NUMBER(9,6)
LONGITUDE	Longitude, decimal degrees, NAD83	NUMBER(9,6)
TDFORMATION	Total depth formation	CHAR(8)
PRODFORM	Producing formation	CHAR(8)
TOTAL_DEPTH	Total depth	NUMBER(5)
SECTION	Well location - section	NUMBER(2)
TWP	Well location - township	NUMBER(2)
TDIR	Well location - township direction	CHAR(1)
RNG	Well location - range	NUMBER(2)
RDIR	Well location - range direction	CHAR(1)
NSFOOT	footage N or S from corner or line	NUMBER(5)
NSDIR	Direction (N or S) for NSFOOT	CHAR(1)
EWFOOT	footage E or W from corner or line	NUMBER(5)
EWDIR	Direction (E or W) for EWFOOT	CHAR(1)
CORNER	Corner for footage directions, blank if footage from a line	CHAR(2)
QUARTERS	if location subdivided into quarters	CHAR(8)
ELEVATION	Elevation	NUMBER(5)
ELEVREF	Elevation Reference:CF - Casing FlangeCO - Elevation from the companyDF - Derrick FloorDM - Digital Elevation ModelDR - DRGES - EstimatedGL - Ground levelGP - GPSKB - Kelly BushingLD - LIDARLS - LaughlinOV- Orbit ValvePT - Plane tableRB- Rotary BushingRT - Rotary tableTM - Topographic map	CHAR(2)

Item Name	Item Description	Item Format
COMP_DATE	Completion date 'YYYYMMDD'	DATE
STATUS	Well status code	CHAR(6)
FARM_NAME	Well name	CHAR(35)
FARM_NUM	Well number	CHAR(10)
COMPANY_NAME	Company name	CHAR(35)
PERMIT_NUMBER	State assigned number - NOT unique	CHAR(7)
PERMIT_DATE	Permit issue date 'YYYYMMDD'	DATE
PLUG_DATE	Date of well plugging 'YYYYMMDD'	DATE
FIELD_CODE	Field code number	NUMBER(4)
MERIDIAN	Meridian 2, 3 or 4	NUMBER(1)
IPBO	Initial Production - Barrels of Oil	NUMBER(4)
IPBW	Initial Production - Barrels of water	NUMBER(4)
IPMCF	Initial Production of gas in thousands of cubic feet	NUMBER(7)
IPMETHOD	Initial Production method: F - Flowing I - shutIn J - Junked P - Pumping S - Show W - Waterflood	CHAR(1)
DST	The number of drill stem tests run	NUMBER(2)
SPUDDATE	Spud Date 'YYYYMMDD'	DATE
INJBW	Amount of water injected per day.	NUMBER(4)
INJMCF	Amount of gas injected per day.	NUMBER(7)
INJECTION_PSI	Injection pressure.	NUMBER(4)

Formation Tops Information:

This list contains formation tops information that is usually entered from the scout tickets. Many tops are added from Geologist picks from log information. Currently there are over 116,000 wells in the ISGS database with formation top information.

Item Name	Item Description	Item Format
API_NUMBER	12 digit number assigned by the ISGS Consists of"12" - state code /three digit county code/5 digit unique number/2 digit re-drill code	CHAR(12)
LATITUDE	Latitude, decimal degrees, NAD83	NUMBER(9,6)
LONGITUDE	Longitude, decimal degrees, NAD83	NUMBER(9,6)
FMTOP	top of formation/unit	NUMBER(5)
FMBASE	base of formation/unit	NUMBER(5)
FORMATION_CODE	formation code top/unit	CHAR(8)
FMNOTES	additional notes about this formation	CHAR(100)

Pay Zone Information:

This list contains pay zone information that is usually entered from the scout tickets and completion reports. Currently there are over 92,000 API numbers in the ISGS database with pay zone information.

Item Name	Item Description	Item Format
API_NUMBER	12 digit number assigned by the ISGS Consists of"12" - state code /three digit county code/5 digit unique number/2 digit re-drill code	CHAR(12)
LATITUDE	Latitude, decimal degrees, NAD83	NUMBER(9,6)
LONGITUDE	Longitude, decimal degrees, NAD83	NUMBER(9,6)
РАҮТОР	top of pay zone/unit	NUMBER(5)
PAYBASE	base of pay zone/unit	NUMBER(5)
PAYSTRAT	formation code top/unit	CHAR(8)
NEWPAY	new pay classification - abandoned, deeper, injection, new, first	VARCHAR2(1)

Treatments: This table contains well treatment information. This table currently contains 34,277 records.

Item Name	Item Description	Item Format
API_NUMBER	12 digit number assigned by the ISGS. Consists of "12" - state code for Illinois /three digit county code/five digit unique number/two digit re-drill code. <foreign index="" key=""></foreign>	CHAR(12)
LATITUDE	Latitude, decimal degrees, NAD83	NUMBER(9,6)
LONGITUDE	Longitude, decimal degrees, NAD83	NUMBER(9,6)
TREATMENT_TYPE	Type of treatment:A - AcidizedD - Drill StemTest (DST)F - FracturedN - Notes onlyP - PerforatedQ - SqueezedS - Shots	CHAR(1)
TREATMENT_NUM	Treatment number.	NUMBER(3)
TREATMENT_TOP	Top of treatment interval	NUMBER(5)
TREATMENT_BOTTOM	Bottom of treatment interval	NUMBER(5)
TREATMENT_INFO	Additional information about the treatment	CHAR(240)

Samples: This table contains the information for samples and cores stored at the ISGS Annex. This table currently contains 83,082 records.

Item Name	Item Description	Item Format
API_NUMBER	12 digit number assigned by the ISGS. Consists of "12" - state code for Illinois /three digit county code/five digit unique number/two digit re-drill code. < Foreign Index Key >	CHAR(12)

Item Name	Item Description	Item Format
LATITUDE	Latitude, decimal degrees, NAD83	NUMBER(9,6)
LONGITUDE	Longitude, decimal degrees, NAD83	NUMBER(9,6)
SAMPLE_TYPE	Type of sample: C - Core S - Sample set F - film of electric log	CHAR(1)
SAMPLE_NUMBER	Sample number. If this is a sample_type of 'F' then this number represents the box number where the film is stored at the ISGS Annex.	NUMBER(5)
SAMPLE_TOP	Top of sample interval	NUMBER(7)
SAMPLE_BOTTOM	Bottom of sample interval	NUMBER(7)
SAMPLE_FORM	Formation code of sample <foreign index="" key=""></foreign> see FORMATIONS table.	CHAR(8)
SAMPLE_SIZE	Size of sample (biscuits, chips)	CHAR(10)
SAMPLE_STUDY	Name of person(s) who studied the samples	CHAR(20)
SS_DATE	Date samples were studied (YYYYMMDD)	DATE
SAMPLE_RECD	Date sample processed (YYYYMMDD)	DATE
AMOUNT	Amount of samples or core	CHAR(20)
ANNEX_LOC	Location of sample/core	CHAR(50)
NUM_BOXES	Number and type of boxes	CHAR(20)
COMMENTS	Additional comments	CHAR(500)

Casing: Well casing information as it appears on the Well Completion Report. This table was created for Oil and Gas well summary sheet generation. This table currently contains 59,320 records for 26,308 wells.

Item Name	Item Description	Item Format
API_NUMBER	12 digit number assigned by the ISGS. Consists of "12" - state code for Illinois /three digit county code/five digit unique number/two digit re-drill code. <foreign index="" key=""></foreign>	CHAR(12)
CASE_PIPE	Casing pipe diameter	CHAR(8)
CASEDEPTH	Depth of casing	NUMBER(5)
CASE_CEMENT_NUM	Amount of cement used	NUMBER(5)
CASE_CEMENT_WITH	Amount of cement measured in yards? feet? sacks?	CHAR(10)
CASE_NOTES	Notes related to casing information.	CHAR(100)