CH2MHILL

PROJECT NUMBER 335392.FI.01

WELL ID

WELL DEVELOPMENT LOG

PROJECT: Omega Chemical OU-2 LOCATION: MW25A 3/8/07

DEVELOPMENT CONTRACTOR: WDC

DEVELOPMENT METHOD AND EQUIPMENT USED: BAIL, SWAB, PUMP

START WATER LEVELS: 38.65 w/ Pump START: 1344 END: 1522

MAXIMUM DRAWDOWN DURING PUMPING:

RANGE AND AVERAGE DISCHARGE RATE: 3gpm LOGGER: M. Ladeau

TOTAL QUANTITY OF WATER DISCHARGED: 300 gallons

DISPOSITION OF DISCHARGE WATER: TANK HML155

MONITORING EQUIPMENT USED: YSI / HACH TURBIDIMETER

Time	Volume Dischared (gal)	Flow Rate (gpm)	Water Level (ft BTOC)	Turbidity (NTU)	Temp. (°C)	pH	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Remarks (color, odor, sheen, sediment, etc.)
1344	PUMP		ON.	INTAKE @ 55' BTC.						
1346	6	3	39.0	>1000	24.18	6.80	1457	36.1	2.67	VERY TURBID
1351	21		41.3	>1000	25.11	6.64	1486	53.8	2.79	TURBID
1401	51		41.3	679	25.15	6.95	1481	49.9	2.92	CLOUDY
1411	81			261	25.07	6.98	1465	79.2	3.02	CLEARING
1421	111			81.3	25.05	6.95	1453	91.5	3.11	CLEAR
1431	141			37.6	24.96	6.92	1443	99.7	3.23	CLEAR
1432	SURGE WELL.									
1440	PUMP ON									
1445	156	3		41.7	25.16	6.93	1447	89.3	2.98	CLEAR
1450	171			32.2	25.12	6.90	1446	96.0	3.02	CLEAR
1500	200			12.1	25.07	6.91	1435	102.0	3.06	CLEAR
1504			41.1	MOVE PUMP INTAKE TO 158' BTC.						
1510	230			13.3	24.98	6.89	1440	100.5	2.99	CLEAR
1520	260			3.34	25.02	6.91	1435	92.6	2.76	CLEAR
1522	PUMP OFF DONE W/ DEVELOPEMENT.									

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CH2MHILL

PROJECT NUMBER 335392.FI.01

WELL ID MW25B

WELL DEVELOPMENT LOG

PROJECT: Omega Chemical OU-2 LOCATION: 3/12/07

DEVELOPMENT CONTRACTOR: WDC

DEVELOPMENT METHOD AND EQUIPMENT USED: BAIL, SWAB, PUMP

START WATER LEVELS: 38.21 START: 0700 END: 1200

MAXIMUM DRAWDOWN DURING PUMPING:

RANGE AND AVERAGE DISCHARGE RATE: LOGGER: M. Ladeau

TOTAL QUANTITY OF WATER DISCHARGED:

DISPOSITION OF DISCHARGE WATER: TANK # HMT 208L

MONITORING EQUIPMENT USED: YSI 556 MPS / HACH TURBIDITY METER

Time	Volume Dischared (gal)	Flow Rate (gpm)	Water Level (ft BTOC)	Turbidity (NTU)	Temp. (°C)	pH	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Remarks (color, odor, sheen, sediment, etc.)
0806		PUMP ON, INTAKE @ 80' BTC								
		3	38.62	W/PUMP IN WELL						
0811			41.80							
0831	75	3	41.73	140	22.11	7.06	1208	96.5	2.45	CLEARING
0849	130	LOWER INTAKE TO 95' BTC								
0850		38.27	W/PUMP @ 95' BTC				PUMP ON.			
0855	145	3	41.22	296	22.20	6.92	1200	95.2	2.54	CLOUDY
0905	175	3		42.0	22.29	6.94	1198	95.1	2.58	CLEAR
0915	205	3	41.26	44.0	22.31	6.95	1197	94.6	2.58	CLEAR
0925	235	3	41.27	19.3	22.37	6.95	1196	94.6	2.56	CLEAR
0926	PUMP OFF. SURGE WELL.									
1000	INSTALL PUMP TO 105' BTC.									
			38.31	W/PUMP @ 105' BTC.						
1005	PUMP ON.									
1015	270	3	41.68	559	22.79	6.99	1195	73.5	2.63	CLOUDY
1025	300	3		62.3	22.67	6.92	1187	90.8	2.69	CLEARING
1035	330		41.66	48.9	22.70	6.96	1186	86.9	2.66	CLEAR
1045	360			24.3	22.74	6.93	1185	92.7	2.71	CLEAR
1055	390			15.4	22.78	6.91	1186	95.2	2.72	CLEAR
1056	SURGE WELL									
1103	PUMP ON.									
1108	405	3		36.8	22.82	6.93	1189	94.1	2.71	CLEAR
1118	435	3	41.46	23.8	22.84	6.94	1189	94.9	2.68	CLEAR
1120	MOVE INTAKE TO 100' BTC.									
1130	470			64.4	22.94	6.91	1187	93.1	2.73	CLEARING
1140	500	3	41.48	27.6	22.94	6.89	1186	97.6	2.65	CLEAR
1150	530			15.4	22.91	6.91	1187	99.6	2.70	CLEAR
1151		PUMP OFF. DONE W/ DEVELOPMENT								

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CH2MHILL

PROJECT NUMBER 335392.FI.01

WELL ID

WELL DEVELOPMENT LOG

PROJECT : Omega Chemical OU-2 LOCATION : MW25C 3/9/07

DEVELOPMENT CONTRACTOR : WDC

DEVELOPMENT METHOD AND EQUIPMENT USED : SWAB, BAIL, PUMP

START WATER LEVELS : 44.2' BTC w/ PUMP START : END :

MAXIMUM DRAWDOWN DURING PUMPING:

RANGE AND AVERAGE DISCHARGE RATE: LOGGER : M. Ladeau

TOTAL QUANTITY OF WATER DISCHARGED:

DISPOSITION OF DISCHARGE WATER: TANK HML155 & HMT208L

MONITORING EQUIPMENT USED: YSI 55MPS / HACH TURBIDITY METER

Time	Volume Dischared (gal)	Flow Rate (gpm)	Water Level (ft BTOC)	Turbidity (NTU)	Temp. (°C)	pH	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Remarks (color, odor, sheen, sediment, etc.)
	SET PUMP IN WELL @ 125' BTC TO PUMP FLUIDS FROM WELL.									
0900	PUMP ON @ 3 gpm									
0930	90		90.1							
0938	114		90.6							
0955	165	PUMP OFF. LOWER INTAKE TO 145' BTC								
1003	PUMP ON 3gpm.									
1008	180	3		130	23.57	7.78	491	2.8	0.70	CLEARING
1013	195			86.6	24.11	7.78	490	1.2	0.54	CLEAR
1023	225		90.35	119	24.30	7.78	496	1.5	0.52	CLEARING
1033	255			142	24.38	7.73	500	3.1	0.52	CLEARING.
1043	285			108	24.31	7.74	480	2.5	0.49	CLEARING.
1053	315			253	24.56	7.71	479	3.7	0.47	CLOUDY
1103	345			>1000	24.35	7.55	530	10.4	0.58	CLOUDY
1113	375	3	86.6	835	24.31	7.42	573	17.3	0.65	CLOUDY
1115	INCREASE PUMPING RATE TO 9gpm TO STRESS WELL FORMATION									
1125	465	9	PUMP OFF. DTW = 142' BTC.							
1147	RECHARGED TO 60', PUMP ON. 9gpm									
1154	528.		140'	PUMP OFF LET RECHARGE.						
1214		4	57.8	PUMP ON. 4gpm						
1219	550		78.1	247	23.14	6.93	480	26.1	0.76	CLOUDY
1224	570			284	23.78	6.72	464	30.4	0.63	CLOUDY
1229	590	4	102	257	23.86	7.11	443	16.6	0.57	CLOUDY
1234	610	4	109.5	206	23.86	7.50	432	11.6	0.52	CLOUDY
1239	630	4	109.8	96.2	23.83	7.60	434	10.8	0.48	CLEARING
1249	670	4	108.4	427	23.74	7.60	458	14.6	0.47	CLOUDY
1304	730	4	102.2	>1000	23.77	7.42	595	16.7	0.68	CLOUDY
1324	810	4	99.6	279	23.58	7.33	643	23.3	0.76	CLOUDY.
1344	890	4	101.1	328	23.83	7.40	614	21.6	0.68	CLOUDY
1354	930	4	101.5	322	23.74	7.39	591	21.4	0.64	CLOUDY
1404	970			547	23.64	7.36	628	25.7	0.65	CLOUDY
1414	1010	4		271	23.66	7.32	633	27.1	0.70	CLOUDY
1424	1050	4	100.8	223	23.63	7.31	625	27.2	0.69	CLOUDY

CH2MHILL

PROJECT NUMBER: 335392.FI.01

WELL ID:

WELL DEVELOPMENT LOG

PROJECT: Omega Chemical OU-2 LOCATION: MW25C 3/8/07

DEVELOPMENT CONTRACTOR: WDC

DEVELOPMENT METHOD AND EQUIPMENT USED: BAIL, SWAB, PUMP

START WATER LEVELS: START: 0900 END: 1230

MAXIMUM DRAWDOWN DURING PUMPING:

RANGE AND AVERAGE DISCHARGE RATE: 3gpm LOGGER: M. Ladeau

TOTAL QUANTITY OF WATER DISCHARGED: 400 gallons

DISPOSITION OF DISCHARGE WATER: TANK# HML 155

MONITORING EQUIPMENT USED: YSI 556 MPS / HACH TURBIDITY METER

Time	Volume Dischared (gal)	Flow Rate (gpm)	Water Level (ft BTOC)	Turbidity (NTU)	Temp. (°C)	pH	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Remarks (color, odor, sheen, sediment, etc.)
0900	SET PUMP @ 143' BTC						DTW= 43.4' BTC			
0912	PUMP ON			3gpm						
0916	12	3		>1000	23.37	8.00	777	-0.6	1.95	VERY TURBID
0921	27		91.5	>1000	24.02	8.08	803	-7.2	1.38	VERY TURBID
0926	42	3	96.2	>1000	24.87	8.02	870	-10.2	1.34	VERY TURBID
0929	REDUCE FLOW RATE TO 2gpm									
0935	54	2		>1000	25.01	7.96	996	-13.9	0.98	TURBID
0945	74	2	96.0	>1000	25.14	7.97	854	-11.8	0.97	CLOUDY NO ODORS
0955	94		94.9	1000	25.18	7.95	784	-10.6	0.95	CLOUDY
1005	114			1000	25.16	7.93	732	-4.8	0.92	CLOUDY
1015	134			752	25.22	7.93	685	-4.2	0.83	CLOUDY
1025	154	2	95.2	545	25.42	7.96	667	-7.5	0.90	CLEARING
1035	174			405	25.32	7.92	639	-8.8	0.81	CLEARING
1045	194			337	25.28	7.84	611	-7.3	0.77	CLEARING
1055	214			350	25.25	7.80	602	-5.2	0.75	CLEARING
1105	234			283	25.36	7.86	592	-9.4	0.71	CLEARING
1115	254		95.5	223	25.23	7.83	581	-8.5	0.69	CLEARING
1125	274			242	25.20	7.79	565	-7.6	0.69	CLEARING
1135	294			237	25.26	7.86	554	-12.9	0.62	CLEARING
1145	314			219	25.22	7.79	552	-9.6	0.63	CLEARING
1155	334			200	25.38	7.79	545	-15.2	0.60	CLEARING
1159	PUMP OFF SURGE WELL									
1212	PUMP ON. INCREASE FLOW RATE TO 3gpm.									
1216	346	3	90.6	243	25.47	7.91	540	7.9	1.56	CLEARING
1226	376			>1000	24.92	7.66	554	0.2	0.67	CLOUDY
1229	PUMP OFF. PULL PUMP AND SWAB WELL AGAIN.									

CH2MHILL

PROJECT NUMBER: 335392.FI.01

WELL ID:

WELL DEVELOPMENT LOG

PROJECT: Omega Chemical OU-2 LOCATION: MW25D

DEVELOPMENT CONTRACTOR: WDC

DEVELOPMENT METHOD AND EQUIPMENT USED: BAIL, SWAB, PUMP

START WATER LEVELS: 66.2' BTC START: END:

MAXIMUM DRAWDOWN DURING PUMPING:

RANGE AND AVERAGE DISCHARGE RATE: 2.5gpm LOGGER: M. Ladeau 3/7/07

TOTAL QUANTITY OF WATER DISCHARGED: ±400 gallons

DISPOSITION OF DISCHARGE WATER: HMT 155

MONITORING EQUIPMENT USED:

Time	Volume Dischared (gal)	Flow Rate (gpm)	Water Level (ft BTOC)	Turbidity (NTU)	Temp. (°C)	pH	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Remarks (color, odor, sheen, sediment, etc.)
	SET PUMP @ 80' BTC				DTW= 55.6' PUMP ON					
1244	200	2.5	57.5							VERY TURBID
1310	PUMP ON @ 150' BTC.									
1327	PUMP ON @ 200' BTC.									
1332	300	2		459	23.20	8.09	837	29.2	2.34	CLOUDY
1337	310			32.1	23.18	7.98	820	32.4	2.13	CLEAR
1342	320			18.2	23.14	7.95	811	32.7	2.17	CLEAR
1352	340			3.78	23.03	7.86	787	33.6	2.15	CLEAR
1353	SURGE WELL PUMP OFF.									
1400	PUMP ON.									
1405	350			5.31	23.18	7.89	783	31.3	2.09	CLEAR
1408	MOVE INTAKE TO 205' BTC.									
1413	360			506	23.09	7.89	785	33.5	2.11	CLOUDY
1418	370	2		17.7	22.91	7.86	772	33.7	2.12	CLEAR
1423	380			3.70	22.74	7.82	762	34.6	2.10	CLEAR
1424	SURGE WELL PUMP OFF									
1433	PUMP ON.									
1438	390			4.25	22.76	7.76	768	34.5	2.18	CLEAR
1440	PUMP OFF.									