



TEXAS BRINE COMPANY, LLC

VERTICAL SURVEY OF WELLS, MONUMENTS, LADOT NAILS, GEOPROBE WELLS AND INSAR REFLECTORS

February - January of 2014

FENSTERMAKER, LLC JOB NO. 2139115.00C

Feature	Survey February 2013				Survey September 2013				Survey January 2014				Comparison	
	Elevation	Separation	Adjusted Elev.	Date	Elevation	Separation	Adjusted Elev.	Date	Elevation	Separation	Adjusted Elev.	Date	Jan. 2014 to Sept. 2013	Jan. 2014 to Feb. 2013
OXY MON. #3	2.579			2/22/2013	2.477			9/26/2013	2.435			1/7/2013	-0.042	-0.144
OXY MON. #5	2.372			2/21/2012	2.331			9/26/2013	2.313			1/7/2013	-0.018	-0.059
OXY MON. #4	2.194			2/21/2012	2.142			9/26/2013	2.121			1/7/2013	-0.021	-0.073
OXY GEISMAR NO. 1 (HOOKER WELL #6)	10.229	0.523	9.706	2/21/2012	10.156	0.526	9.630	9/26/2013	10.135	0.535	9.600	1/7/2013	-0.030	-0.106
OXY GEISMAR NO. 2 (HOOKER WELL #7)	10.307	0.758	9.549	2/21/2012	10.200	0.757	9.443	9/26/2013	10.169	0.761	9.408	1/7/2013	-0.035	-0.141
OXY GEISMAR NO. 3 (HOOKER WELL #8)	5.259	Punch Mark on Casing		2/21/2012	5.125			9/26/2013	5.094			1/7/2013	-0.031	-0.165
OXY WELL #9	7.741	0.835	6.906	2/22/2013	7.669	0.837	6.832	9/26/2013	7.648	0.836	6.812	1/7/2013	-0.020	-0.094
OXY WELL #10	10.027	0.871	9.156	2/22/2013	9.962	0.870	9.092	9/26/2013	9.940	0.871	9.069	1/7/2013	-0.023	-0.087

Elevations on wells are measured to the top flange. The Separation between valves is then measured down to top of Bradenhead valve. The Separation is subtracted from the Elevation to provide the Adjusted Elevation.



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Louisiana Department of Transportation Nails														
LADOT 500	7.051			2/20/2018	7.003			9/25/2013	6.985			1/3/2013	-0.018	-0.066
LADOT 501	6.805			2/20/2017	6.750			9/25/2013	6.728			1/3/2013	-0.022	-0.077
LADOT 502	6.780			2/20/2016	6.723			9/25/2013	6.699			1/3/2013	-0.024	-0.081
LADOT 503	6.866			2/20/2015	6.825			9/25/2013	6.803			1/3/2013	-0.022	-0.063
LADOT 504	6.824			2/20/2014	6.778			9/25/2013	6.754			1/3/2013	-0.024	-0.070
LADOT 505	6.426			2/20/2013	6.359			9/25/2013	6.343			1/3/2013	-0.016	-0.083
LADOT 506	6.679			2/20/2012	6.634			9/24/2013	6.623			1/3/2013	-0.011	-0.056
LADOT 507	6.482			2/19/2013	6.431			9/24/2013	6.424			1/3/2013	-0.007	-0.058
LADOT 511 (Add. Nail Found)	6.544			2/20/2012	6.500			9/25/2014	6.484			1/3/2013	-0.016	-0.060
LADOT 513	6.149			2/19/2013	6.107			9/24/2013	6.100			1/3/2013	-0.007	-0.049
LADOT 514	6.526			2/19/2013	6.494			9/24/2013	6.487			1/3/2013	-0.007	-0.039
LADOT 515	5.833			2/19/2013	5.801			9/24/2013	5.794			1/3/2013	-0.007	-0.039
LADOT 516	6.049			2/19/2013	6.004			9/24/2013	6.003			1/3/2013	-0.001	-0.046
LADOT 517	7.464			2/19/2013	7.413			9/24/2013	7.413			1/3/2013	0.000	-0.051
LADOT 518 (Add. Nail Found)	8.082			2/19/2013	8.050			9/24/2013	8.050			1/3/2013	0.000	-0.032
LADOT 519	7.655			2/19/2013	7.622			9/24/2013	7.622			1/3/2013	0.000	-0.033
LADOT 520	6.502			2/19/2013	6.473			9/24/2013	6.470			1/2/2013	-0.003	-0.032
LADOT 521	7.279			2/20/2012	7.246			9/25/2012	7.231			1/3/2013	-0.015	-0.048
LADOT 522	7.278			2/21/2012	7.257			9/25/2013	7.247			1/3/2013	-0.010	-0.031
LADOT 523	9.546			2/21/2012	9.531			9/25/2013	9.523			1/3/2013	-0.008	-0.023
LADOT 524	7.668			2/21/2012	7.656			9/25/2013	7.651			1/6/2013	-0.005	-0.017
LADOT 525 (Add. Nail Found)	7.618			2/21/2012	7.605			9/26/2014	7.596			1/6/2013	-0.009	-0.022
LADOT 526	8.707			2/21/2012	8.687			9/26/2014	8.682			1/6/2013	-0.005	-0.025



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RESPEC Geoprobe Wells														
GP-1	3.737	0.358	3.379	2/25/2012	3.707	0.360	3.347	9/27/2013	3.820	0.480	3.340	1/7/2013	-0.007	-0.039
GP-2	4.499	0.418	4.081	2/25/2012	4.487	0.400	4.087	9/27/2013	4.646	0.560	4.086	1/7/2013	-0.001	0.005
GP-3	5.032	0.390	4.642	2/26/2013	4.982	0.400	4.582	9/27/2014	5.041	0.463	4.578	1/7/2013	-0.004	-0.064
GP-4	4.500	0.372	4.128	2/25/2012	4.476	0.380	4.096	9/27/2013	4.649	0.550	4.099	1/7/2013	0.003	-0.029
GP-5	4.949	0.391	4.558	2/22/2013	4.932	0.380	4.552	9/26/2014	4.995	0.680	4.315	1/6/2013	-0.237	-0.243
GP-6	5.622	0.351	5.271	2/22/2013	5.610	0.382	5.228	9/26/2014	5.723	0.500	5.223	1/6/2013	-0.005	-0.048
BM-5 (Monument)	4.979		4.979	2/27/2013	4.969	0.065	4.904	9/26/2014	4.931			1/6/2013	0.027	-0.048
Shaw Group Geoprobe Wells														
NSDMW001	4.022	0.351	3.671	2/22/2013	4.111	0.468	3.643	9/26/2014	4.112	0.470	3.642	1/6/2013	-0.001	-0.029
NSDMW002	4.666	0.382	4.284	2/22/2013	4.807	0.545	4.262	9/26/2014	4.807	0.550	4.257	1/6/2013	-0.005	-0.027
NSDMW003	4.367	0.348	4.019	2/21/2013	4.628	0.612	4.016	9/26/2014	4.615	0.541	4.074	1/6/2013	0.058	0.055
NSDMW004	3.328	0.382	2.946	2/22/2013	3.433	0.488	2.945	9/26/2014	3.419	0.481	2.938	1/6/2013	-0.007	-0.008
NSDMW005	2.914	0.428	2.486	2/21/2013	3.104	0.612	2.492	9/26/2014	3.101	0.650	2.451	1/6/2013	-0.041	-0.035
NSDMW006	3.185	0.432	2.753	2/22/2013	3.338	0.550	2.788	9/26/2014	3.329	0.548	2.781	1/6/2013	-0.007	0.028
NSDMW007	4.012	0.572	3.440	2/26/2012	3.958	0.570	3.388	9/30/2014	3.934	0.570	3.364	1/8/2013	-0.024	-0.076
NSDMW008	3.857	0.620	3.237	2/26/2012	3.801	0.618	3.183	9/30/2014	3.778	0.620	3.158	1/8/2013	-0.025	-0.079
NSDMW009	4.462	0.456	4.006	2/26/2012	4.435	0.490	3.945	9/30/2014	4.423	0.480	3.943	1/8/2013	-0.002	-0.063
NSDMW010	4.185	0.662	3.523	2/26/2012	4.148	0.675	3.473	9/30/2014	4.128	0.640	3.488	1/8/2013	0.015	-0.035
NSDMW011	2.563	0.661	1.902	2/27/2012	2.538	0.625	1.913	9/27/2013	2.540	0.630	1.910	1/8/2013	-0.003	0.008
NSDMW012	2.769	0.681	2.088	2/27/2012	2.743	0.540	2.203	9/27/2013	2.742	0.610	2.132	1/8/2013	-0.071	0.044
NSDMW013	4.130	0.618	3.512	2/26/2012	4.086	0.535	3.551	9/27/2013	4.082	0.610	3.472	1/8/2013	-0.079	-0.040
NSDMW014	3.708	0.579	3.129	2/26/2012	3.678	0.515	3.163	9/27/2013	3.670	0.590	3.080	1/8/2013	-0.083	-0.049
NSDMW015	4.291	0.432	3.859	2/25/2012	4.481	0.530	3.951	9/27/2013	4.462	0.608	3.854	1/7/2013	-0.097	-0.005
NSDMW016	5.246	0.448	4.798	2/25/2012	5.305	0.502	4.803	9/27/2013	5.293	0.540	4.753	1/7/2013	-0.050	-0.045
NSDMW017	4.329	0.700	3.629	2/26/2012	4.300	0.695	3.605	9/27/2013	4.286	0.700	3.586	1/7/2013	-0.019	-0.043

Elevations on Geoprobe wells are to the top of the valve or bull plug. Separations is measured from the valve or bull plug to the top of the PVC Casing. The Separation is subtracted from the Elevation to provide and Adjusted Elevation.



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Additional Relief Wells														
ORW 12	8.058			2/25/2013	Plugged & Abandon								X	X
NSDORW001	7.794			2/26/2013	7.758			9/30/2014	7.741			1/8/2013	-0.017	-0.053
NSDORW002	8.320			2/26/2013	8.280			9/30/2014	8.254			1/8/2013	-0.026	-0.066
NSDORW003	7.329			2/21/2013	7.309			9/26/2014	7.306			1/6/2013	-0.003	-0.023
NSDORW015	7.318			2/26/2013	7.274			9/30/2014	7.256			1/8/2013	-0.018	-0.062
NSDORW022	Wells were not drilled or Functioning				8.679	0.168	8.511	9/30/2014	8.673	0.167	8.506	1/7/2013	-0.005	X
NSDORW023					8.285	0.175	8.110	9/30/2014	8.281	0.176	8.105	1/7/2013	-0.005	X
NSDORW024					9.064	0.170	8.894	9/30/2014	9.040	0.171	8.869	1/7/2013	-0.025	X
TBC No. 2 Relief Well					6.225			2/25/2013						
Miller and Associates Points														
TBM 30 (Rebar)	3.832			2/21/2013	Destroyed								X	X
BASE POINT A (Rebar)	6.629			2/22/2013	6.553			9/26/2013	6.533			1/7/2013	-0.020	-0.096
REFERENCE POINT A (Iron Pipe)	5.801			2/22/2013	5.732			9/27/2013	5.704			1/7/2013	-0.028	-0.097
Transducer Elevations (Top of PVC)														
Transducer Pad 3 Dome Elevation	5.208			2/21/2013	4.957			9/26/2013	Unable to Survey due to New Equipment Added to Support Pole				X	X
Transducer Pad 3 NAVD 88 Geoid 12	4.177			2/25/2013									X	X
InSAR Reflectors Land Based														
AR-1	6.056	7.940	13.996	2/27/2013										
AR-6	4.786	6.605	11.391	2/21/2013	4.707	6.555	11.262	9/26/2013	4.680	6.523	11.203	1/7/2013	-0.059	-0.188
AR-7	4.924	6.520	11.444	2/21/2013	4.831	6.540	11.371	9/26/2013	4.800	6.484	11.284	1/7/2013	-0.087	-0.160
AR-8	5.319	7.170	12.489	2/21/2013	5.218	7.180	12.398	9/26/2013	5.190	7.146	12.336	1/7/2013	-0.062	-0.153
AR-10					5.761	9.950	15.711	9/26/2013	Missing				X	X
AR-13	5.980	9.945	15.925	2/21/2013									X	X
AR-17	4.841	5.422	10.263	2/22/2013	4.771	5.430	10.201	9/26/2013	4.744	5.420	10.164	1/7/2013	-0.037	-0.099
AR-19	3.560	6.443	10.003	2/22/2013	3.494	6.450	9.944	9/26/2013	3.472	6.454	9.926	1/7/2013	-0.018	-0.077
AR-20	5.789	10.290	16.079	2/21/2013	5.336	10.350	15.686	9/26/2013	5.214	10.350	15.564	1/7/2013	-0.122	-0.515

Elevations are to a rod placed at the base of the reflectors. The Separation is then measured up to the top base of the reflector. The Separation is then added to the Elevation to determine Adjusted Elevation.



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Newly installed InSar Reflectors														
AR-14 (AR-27)	Not Installed				Not Installed				4.134	7.350	11.484	1/8/2013	X	X
AR-NORTH (AR-28)									3.601	8.280	11.881	1/8/2013	X	X
AR-3 (AR-23)									4.453	8.060	12.513	1/8/2013	X	X
AR-SOUTH (AR-38)									5.125		5.125	1/8/2013	X	X