Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

July 11, 2018

OXY USA Inc.
P.O. BOX 2289
Houston, TX 77252

Re:

12, T24S, R30E, Eddy NM
N 32.22619 W -103.82838

CLIENT: OXY USA Inc.
WELL: Nimitz MDP1 13 Federal Com 2H
FIELD: Corral Draw Bone Spring

RIG: H&P 656
COUNTY: Eddy
API NO: 30-015-44498-0000
JOB NO: 18MLD1171

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900).
Other information required by your office is as follows.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
Robert Hargrave FE	Nimitz MDP1 13 Federal Com 2H Original Hole	10071.00 Ft 15036.00 Ft	to	June 12, 2018 June 19, 2018	to	SlimPulse

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Mike Stephens
Field Service Manager

Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

Well Reference:
12, T24S, R30E, Eddy NM
N 32.22619 W -103.82838

I, Robert Hargrave certify that: I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of June 12, 2018 through June 19, 2018, conduct or supervise the taking of the SlimPulse surveys from a depth of 10071.00 feet to a depth of 15036.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of OXY USA Inc. for the Nimitz MDP1 13 Federal Com 2H Well (Original Hole) API No. 30-015-44498-0000 in New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By
Robert Hargrave
FE

Subscribed and Sworn to before me this 11th day of July (month) 2018 (yr)

My Commission expires:

2-16-2022

D Adams (signature)

Notary Public

Adams County Colorado

(County State)

DONNA ADAMS
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20184007893
MY COMMISSION EXPIRES FEBRUARY 16, 2022

Schlumberger

Oxy Nimitz MDP1 13 Federal Com 2H Gyro+MWD 0-15,077' Survey
Geodetic Report
(Def Survey)

Report Date:	June 20, 2018 - 09:43 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	OXY	**Vertical Section Azimuth:**	188.807 ° (Grid North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Oxy Nimitz MDP1 13 Federal Com 2H / Oxy Nimitz MDP1 13 Federal Com 2H	**TVD Reference Datum:**	RKB=26.5'
Well:	Oxy Nimitz MDP1 13 Federal Com 2H	**TVD Reference Elevation:**	3552.400 ft above MSL
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3525.900 ft above MSL
UWI / API#:	Unknown / 30-015-44498	**Magnetic Declination:**	6.912 °
Survey Name:	Oxy Nimitz MDP1 13 Federal Com 2H Gyro+MWD 0-15,077'	**Total Gravity Field Strength:**	998.4284mgn (9.80665 Based)
Survey Date:	May 29, 2018	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	190.160 ° / 8121.344 ft / 6.245 / 0.613	**Total Magnetic Field Strength:**	48013.573 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.974 °
Location Lat / Long:	N 32° 13' 34.26964", W 103° 49' 42.15057"	**Declination Date:**	May 29, 2018
Location Grid N/E Y/X:	N 446387.180 ftUS, E 697483.900 ftUS	**Magnetic Declination Model:**	HDGM 2018
CRS Grid Convergence Angle:	0.2693 °	**North Reference:**	Grid North
Grid Scale Factor:	0.99993702	**Grid Convergence Used:**	0.2693 °
Version / Patch:	2.10.720.0	**Total Corr Mag North->Grid North:**	6.6428 °
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	446387.18	697483.90	N 32 13 34.27	W 103 49 42.15
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	446387.18	697483.90	N 32 13 34.27	W 103 49 42.15
	88.10	0.21	55.01	88.10	-0.08	0.06	0.09	0.34	446387.24	697483.99	N 32 13 34.27	W 103 49 42.15
	182.50	0.13	87.23	182.50	-0.22	0.17	0.34	0.13	446387.35	697484.24	N 32 13 34.27	W 103 49 42.15
	277.00	0.07	61.93	277.00	-0.28	0.20	0.50	0.08	446387.38	697484.40	N 32 13 34.27	W 103 49 42.14
	371.40	0.03	337.33	371.40	-0.33	0.25	0.54	0.08	446387.43	697484.44	N 32 13 34.27	W 103 49 42.14
	465.80	0.10	305.30	465.80	-0.39	0.32	0.48	0.08	446387.50	697484.38	N 32 13 34.27	W 103 49 42.15
	560.30	0.11	327.02	560.30	-0.49	0.45	0.35	0.04	446387.63	697484.25	N 32 13 34.27	W 103 49 42.15
	657.20	0.34	202.13	657.20	-0.28	0.26	0.19	0.43	446387.44	697484.09	N 32 13 34.27	W 103 49 42.15
	751.20	2.48	197.24	751.16	2.00	-1.94	-0.52	2.28	446385.24	697483.38	N 32 13 34.25	W 103 49 42.16
	845.20	2.61	197.56	845.06	6.29	-6.08	-1.62	0.15	446381.10	697482.08	N 32 13 34.21	W 103 49 42.17
	945.40	0.79	197.69	945.21	9.40	-9.08	-2.77	2.02	446378.10	697481.13	N 32 13 34.18	W 103 49 42.18
	1039.80	0.07	181.89	1039.61	10.09	-9.76	-2.95	0.78	446377.42	697480.95	N 32 13 34.17	W 103 49 42.19
	1134.10	0.06	63.23	1133.91	10.12	-9.79	-2.89	0.10	446377.39	697481.01	N 32 13 34.17	W 103 49 42.18
	1228.40	0.03	55.92	1228.21	10.07	-9.75	-2.82	0.03	446377.43	697481.08	N 32 13 34.17	W 103 49 42.18
	1322.80	0.10	74.33	1322.71	10.02	-9.72	-2.72	0.08	446377.46	697481.18	N 32 13 34.17	W 103 49 42.18
	1417.30	0.13	85.33	1417.11	9.96	-9.69	-2.54	0.04	446377.49	697481.36	N 32 13 34.17	W 103 49 42.18
	1511.60	0.13	89.07	1511.41	9.92	-9.68	-2.32	0.01	446377.50	697481.58	N 32 13 34.17	W 103 49 42.18
	1605.90	0.16	83.93	1605.71	9.87	-9.66	-2.08	0.03	446377.52	697481.82	N 32 13 34.17	W 103 49 42.18
	1700.40	0.17	90.40	1700.21	9.83	-9.66	-1.81	0.04	446377.52	697482.09	N 32 13 34.17	W 103 49 42.17
	1794.60	0.17	84.76	1794.60	9.79	-9.67	-1.54	0.04	446377.52	697482.36	N 32 13 34.17	W 103 49 42.17
	1889.20	0.16	74.75	1889.00	9.69	-9.61	-1.25	0.03	446377.57	697482.65	N 32 13 34.17	W 103 49 42.17
	1983.70	0.15	56.31	1983.50	9.55	-9.51	-1.00	0.06	446377.67	697482.90	N 32 13 34.18	W 103 49 42.16
	2078.00	0.14	49.29	2077.80	9.38	-9.37	-0.81	0.03	446377.81	697483.09	N 32 13 34.18	W 103 49 42.16
	2172.40	0.14	34.95	2172.20	9.19	-9.20	-0.66	0.04	446377.98	697483.24	N 32 13 34.18	W 103 49 42.16
	2266.80	0.13	52.78	2266.60	9.01	-9.04	-0.51	0.05	446378.14	697483.39	N 32 13 34.18	W 103 49 42.16
	2361.10	0.11	32.89	2360.90	8.85	-8.90	-0.37	0.05	446378.28	697483.53	N 32 13 34.18	W 103 49 42.16
	2461.40	0.10	27.91	2461.20	8.68	-8.74	-0.28	0.01	446378.44	697483.62	N 32 13 34.18	W 103 49 42.15
	2555.70	0.11	41.62	2555.50	8.53	-8.60	-0.18	0.03	446378.58	697483.72	N 32 13 34.18	W 103 49 42.15
	2650.00	0.11	41.46	2649.80	8.38	-8.47	-0.06	0.00	446378.71	697483.84	N 32 13 34.19	W 103 49 42.15
	2744.50	0.10	34.50	2744.30	8.22	-8.33	0.05	0.02	446378.85	697483.95	N 32 13 34.19	W 103 49 42.15
	2838.90	0.13	33.77	2838.70	8.05	-8.17	0.15	0.03	446379.01	697484.05	N 32 13 34.19	W 103 49 42.15
	2933.30	0.12	324.92	2933.10	7.88	-8.00	0.15	0.15	446379.18	697484.05	N 32 13 34.19	W 103 49 42.15
	3027.70	0.15	322.61	3027.50	7.73	-7.82	0.02	0.03	446379.36	697483.92	N 32 13 34.19	W 103 49 42.15
	3122.00	0.20	328.84	3121.80	7.52	-7.59	-0.14	0.05	446379.59	697483.78	N 32 13 34.19	W 103 49 42.15
	3216.40	0.14	304.35	3216.20	7.35	-7.38	-0.33	0.09	446379.80	697483.57	N 32 13 34.20	W 103 49 42.15
	3310.80	0.15	311.36	3310.60	7.23	-7.24	-0.52	0.02	446379.94	697483.38	N 32 13 34.20	W 103 49 42.16
	3405.10	0.18	314.42	3404.90	7.08	-7.05	-0.71	0.03	446380.13	697483.19	N 32 13 34.20	W 103 49 42.16
	3499.60	0.10	301.32	3499.40	6.96	-6.91	-0.89	0.09	446380.27	697483.01	N 32 13 34.20	W 103 49 42.16
	3594.00	0.09	285.26	3593.80	6.92	-6.84	-1.03	0.03	446380.34	697482.87	N 32 13 34.20	W 103 49 42.16
	3688.30	0.13	228.37	3688.10	7.00	-6.90	-1.16	0.12	446380.28	697482.72	N 32 13 34.20	W 103 49 42.16
	3782.70	0.14	176.91	3782.50	7.19	-7.08	-1.20	0.12	446380.10	697482.64	N 32 13 34.20	W 103 49 42.17
	3877.20	0.12	201.32	3877.00	7.40	-7.29	-1.29	0.06	446379.89	697482.61	N 32 13 34.20	W 103 49 42.17
	3971.50	0.16	205.78	3971.30	7.62	-7.50	-1.38	0.04	446379.68	697482.52	N 32 13 34.20	W 103 49 42.17
	4065.70	0.10	168.02	4065.50	7.83	-7.70	-1.42	0.11	446379.48	697482.48	N 32 13 34.19	W 103 49 42.17
	4159.90	0.07	129.31	4159.70	7.93	-7.82	-1.36	0.07	446379.36	697482.54	N 32 13 34.19	W 103 49 42.17
	4254.10	0.09	188.35	4254.10	8.03	-7.92	-1.30	0.06	446379.26	697482.60	N 32 13 34.19	W 103 49 42.17
	4348.50	0.09	133.60	4348.30	8.14	-8.03	-1.23	0.06	446379.14	697482.67	N 32 13 34.19	W 103 49 42.17
	4442.90	0.10	120.05	4442.70	8.21	-8.13	-1.10	0.02	446379.05	697482.80	N 32 13 34.19	W 103 49 42.16
	4537.20	0.07	138.34	4537.00	8.27	-8.22	-0.99	0.04	446378.96	697482.91	N 32 13 34.19	W 103 49 42.16
	4631.60	0.12	97.85	4631.40	8.31	-8.28	-0.85	0.09	446378.90	697483.05	N 32 13 34.19	W 103 49 42.16
	4726.00	0.10	87.43	4725.80	8.29	-8.29	-0.67	0.03	446378.90	697483.23	N 32 13 34.19	W 103 49 42.16
	4820.30	0.10	108.07	4820.10	8.29	-8.31	-0.51	0.04	446378.87	697483.39	N 32 13 34.19	W 103 49 42.16
	4914.60	0.09	333.79	4914.40	8.24	-8.27	-0.47	0.19	446378.91	697483.43	N 32 13 34.19	W 103 49 42.16
	5008.90	0.07	336.08	5008.70	8.13	-8.15	-0.52	0.02	446379.03	697483.38	N 32 13 34.19	W 103 49 42.16
	5103.10	0.09	329.52	5103.10	8.03	-8.03	-0.59	0.02	446379.15	697483.31	N 32 13 34.19	W 103 49 42.16
	5197.90	0.07	337.43	5197.70	7.92	-7.91	-0.65	0.02	446379.27	697483.25	N 32 13 34.19	W 103 49 42.16
	5292.20	0.14	0.97	5292.00	7.76	-7.74	-0.67	0.09	446379.44	697483.23	N 32 13 34.19	W 103 49 42.16
	5386.60	0.42	287.77	5386.40	7.59	-7.52	-0.99	0.43	446379.66	697482.91	N 32 13 34.20	W 103 49 42.16
	5480.90	2.35	280.24	5480.68	7.49	-7.07	-3.23	2.05	446380.11	697480.68	N 32 13 34.20	W 103 49 42.19
	5575.10	4.64	278.36	5574.68	7.47	-6.18	-8.90	2.43	446381.00	697475.00	N 32 13 34.21	W 103 49 42.25
	5669.60	6.70	276.64	5668.72	7.70	-4.98	-18.15	2.19	446382.20	697465.75	N 32 13 34.22	W 103 49 42.36
	5764.00	7.87	275.03	5762.35	8.34	-3.78	-30.06	1.26	446383.40	697453.84	N 32 13 34.23	W 103 49 42.50
	5858.50	8.30	271.04	5855.91	9.09	-3.09	-43.33	0.75	446384.09	697440.56	N 32 13 34.24	W 103 49 42.66
	5952.80	8.55	266.40	5949.20	12.11	-3.41	-57.13	0.77	446383.77	697426.77	N 32 13 34.24	W 103 49 42.82
	6047.20	9.55	263.12	6042.42	15.74	-4.78	-71.91	1.19	446382.40	697412.00	N 32 13 34.23	W 103 49 42.99
	6141.60	11.12	260.63	6135.29	20.69	-7.21	-88.68	1.73	446379.98	697395.24	N 32 13 34.20	W 103 49 43.18
	6236.00	12.93	258.27	6227.61	27.24	-10.83	-107.99	1.99	446376.35	697375.92	N 32 13 34.17	W 103 49 43.41
	6330.50	13.18	255.79	6319.67	35.16	-15.83	-128.79	0.65	446371.35	697355.12	N 32 13 34.12	W 103 49 43.65
	6424.80	12.91	249.16	6411.54	44.58	-22.02	-149.05	1.61	446365.17	697334.86	N 32 13 34.06	W 103 49 43.89
	6519.10	12.66	249.43	6503.50	54.66	-29.39	-168.57	0.27	446357.79	697315.34	N 32 13 33.99	W 103 49 44.11
	6613.50	12.77	250.16	6595.59	64.93	-36.57	-188.07	0.21	446350.61	697295.84	N 32 13 33.92	W 103 49 44.34
	6707.90	13.06	249.85	6687.60	75.09	-43.76	-207.90	0.31	446343.40	697276.01	N 32 13 33.85	W 103 49 44.57
	6802.30	12.89	250.45	6779.57	85.30	-51.01	-227.91	0.14	446336.16	697256.00	N 32 13 33.78	W 103 49 44.81
	6896.60	12.78	249.83	6871.50	95.40	-58.16	-247.69	0.25	446329.02	697236.22	N 32 13 33.71	W 103 49 45.04
	6990.80	13.03	249.70	6963.32	105.60	-65.43	-267.42	0.23	446321.75	697216.50	N 32 13 33.63	W 103 49 45.27
	7085.30	12.81	249.85	7055.43	115.85	-72.73	-287.22	0.20	446314.46	697196.70	N 32 13 33.56	W 103 49 45.50
	7179.70	13.01	250.20	7147.45	126.00	-79.93	-307.04	0.23	446307.25	697176.88	N 32 13 33.49	W 103 49 45.73

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7274.10	12.90	249.03	7239.44	136.32	-87.30	-326.86	0.30	446299.88	697157.04	N 32 13 33.42	W 103 49 45.96
	7368.40	12.84	249.29	7331.37	146.71	-94.78	-348.51	0.09	446292.41	697137.41	N 32 13 33.35	W 103 49 46.19
	7462.80	12.45	249.12	7423.49	156.92	-102.11	-365.83	0.42	446285.07	697118.09	N 32 13 33.28	W 103 49 46.41
	7557.30	12.43	248.79	7515.77	167.05	-109.42	-384.83	0.08	446277.76	697099.10	N 32 13 33.20	W 103 49 46.64
	7651.50	12.15	248.70	7607.81	177.10	-116.69	-403.52	0.30	446270.50	697080.41	N 32 13 33.13	W 103 49 46.85
	7745.70	12.48	248.88	7699.84	187.15	-123.96	-422.25	0.36	446263.22	697061.67	N 32 13 33.06	W 103 49 47.07
	7840.10	12.20	248.85	7792.06	197.22	-131.24	-441.08	0.31	446255.95	697042.85	N 32 13 32.99	W 103 49 47.29
	7934.50	12.03	254.92	7884.36	206.19	-137.40	-459.86	1.38	446249.79	697024.05	N 32 13 32.93	W 103 49 47.51
	8028.90	12.29	256.84	7976.64	213.60	-141.90	-478.24	0.92	446245.29	697004.69	N 32 13 32.89	W 103 49 47.74
	8123.30	12.19	259.19	8068.89	220.38	-145.72	-496.88	0.13	446241.47	696985.05	N 32 13 32.85	W 103 49 47.97
	8217.60	11.72	260.12	8161.15	226.79	-149.23	-516.10	0.54	446237.96	696965.83	N 32 13 32.82	W 103 49 48.19
	8312.00	11.41	260.46	8253.63	232.80	-152.42	-536.75	0.34	446234.77	696947.18	N 32 13 32.79	W 103 49 48.41
	8406.50	12.22	260.78	8346.13	238.84	-155.58	-555.84	0.88	446231.61	696928.09	N 32 13 32.76	W 103 49 48.63
	8501.00	12.38	259.50	8438.46	245.28	-159.02	-575.66	0.32	446228.17	696908.28	N 32 13 32.72	W 103 49 48.86
	8595.40	11.92	258.78	8530.75	251.98	-162.76	-595.19	0.49	446224.43	696888.78	N 32 13 32.69	W 103 49 49.09
	8689.80	11.83	259.32	8623.17	258.48	-166.42	-614.07	0.33	446220.77	696869.87	N 32 13 32.65	W 103 49 49.31
	8784.20	10.94	258.70	8715.74	264.73	-169.94	-632.20	0.74	446217.25	696851.74	N 32 13 32.62	W 103 49 49.52
	8878.70	11.48	260.30	8808.44	270.80	-173.28	-650.27	0.66	446213.91	696833.68	N 32 13 32.59	W 103 49 49.73
	8973.10	12.00	259.78	8900.88	276.98	-176.81	-669.18	0.56	446210.38	696814.76	N 32 13 32.55	W 103 49 49.95
	9067.70	12.29	257.89	8993.35	283.79	-180.47	-688.71	0.52	446206.72	696795.24	N 32 13 32.52	W 103 49 50.18
	9162.10	12.34	257.04	9085.57	291.11	-184.84	-708.38	0.20	446202.35	696775.59	N 32 13 32.47	W 103 49 50.41
	9256.40	12.34	258.30	9177.69	298.38	-189.14	-728.05	0.29	446198.05	696755.90	N 32 13 32.43	W 103 49 50.64
	9350.80	12.39	258.16	9269.90	305.48	-193.27	-747.84	0.06	446193.92	696736.11	N 32 13 32.39	W 103 49 50.87
	9445.30	12.14	259.06	9362.25	312.42	-197.23	-767.51	0.33	446189.96	696716.44	N 32 13 32.35	W 103 49 51.10
	9539.60	14.95	242.63	9453.95	322.95	-204.71	-788.06	5.02	446182.48	696695.89	N 32 13 32.28	W 103 49 51.34
	9634.20	18.90	210.13	9544.83	344.48	-223.62	-806.64	10.86	446163.57	696677.31	N 32 13 32.09	W 103 49 51.55
	9728.50	30.21	198.50	9630.31	382.24	-259.47	-821.69	12.99	446127.73	696662.06	N 32 13 31.74	W 103 49 51.73
	9822.80	34.98	187.68	9709.89	432.78	-308.88	-833.06	7.96	446078.32	696650.90	N 32 13 31.25	W 103 49 51.86
	9917.30	42.39	183.80	9783.54	491.61	-367.54	-838.68	8.30	446019.66	696645.27	N 32 13 30.67	W 103 49 51.93
Last Gyro	10011.60	52.38	181.78	9847.31	560.51	-436.77	-841.85	10.89	445950.43	696642.11	N 32 13 29.99	W 103 49 51.97
	10071.00	56.85	183.94	9881.79	606.61	-485.06	-844.26	7.77	445902.15	696639.67	N 32 13 29.51	W 103 49 52.01
	10165.00	67.67	181.94	9925.62	691.15	-567.94	-848.47	11.87	445819.27	696635.49	N 32 13 28.69	W 103 49 52.06
	10260.00	80.85	181.43	9951.33	781.68	-659.14	-851.14	13.88	445728.08	696632.82	N 32 13 27.79	W 103 49 52.09
	10354.00	88.35	184.11	9960.18	874.67	-752.54	-855.67	8.47	445634.69	696628.29	N 32 13 26.86	W 103 49 52.15
	10380.00	87.87	184.11	9961.03	900.37	-778.46	-857.53	1.85	445608.77	696626.43	N 32 13 26.61	W 103 49 52.18
	10474.00	88.07	185.40	9964.38	994.27	-872.07	-865.32	1.39	445515.16	696618.64	N 32 13 25.68	W 103 49 52.27
	10568.00	88.55	185.50	9967.13	1088.07	-965.61	-874.24	0.52	445421.64	696609.72	N 32 13 24.76	W 103 49 52.38
	10663.00	89.26	186.47	9968.93	1182.94	-1060.07	-884.14	1.28	445327.18	696599.81	N 32 13 23.82	W 103 49 52.50
	10757.00	89.45	185.88	9969.98	1276.83	-1153.52	-894.24	0.67	445233.73	696589.72	N 32 13 22.90	W 103 49 52.62
	10852.00	90.17	181.18	9970.29	1371.40	-1248.31	-900.07	4.96	445138.95	696583.89	N 32 13 21.96	W 103 49 52.70
	10946.00	89.78	175.38	9970.35	1463.77	-1342.23	-897.23	6.21	445045.04	696586.73	N 32 13 21.03	W 103 49 52.67
	11041.00	90.00	172.75	9970.55	1555.83	-1436.71	-887.39	2.78	444950.56	696596.56	N 32 13 20.09	W 103 49 52.56
	11135.00	89.72	170.24	9970.78	1645.37	-1529.67	-873.49	2.69	444857.61	696610.48	N 32 13 19.17	W 103 49 52.40
	11230.00	89.66	170.70	9971.29	1735.54	-1623.36	-857.77	0.49	444763.93	696626.19	N 32 13 18.25	W 103 49 52.22
	11324.00	89.45	172.50	9972.02	1825.33	-1716.34	-844.03	1.93	444670.95	696639.92	N 32 13 17.33	W 103 49 52.07
	11418.00	89.41	174.71	9972.98	1916.03	-1808.75	-833.57	2.35	444577.55	696650.39	N 32 13 16.40	W 103 49 51.95
	11513.00	88.87	179.12	9974.38	2008.96	-1904.57	-828.45	4.68	444482.73	696655.50	N 32 13 15.46	W 103 49 51.90
	11607.00	87.22	183.85	9977.59	2102.11	-1998.46	-830.89	5.33	444388.85	696653.07	N 32 13 14.53	W 103 49 51.93
	11702.00	88.08	187.21	9981.49	2196.88	-2092.92	-840.03	3.65	444294.39	696643.92	N 32 13 13.60	W 103 49 52.04
	11796.00	87.97	188.99	9984.73	2290.78	-2186.15	-851.84	0.26	444201.18	696632.31	N 32 13 12.68	W 103 49 52.18
	11890.00	88.73	184.48	9987.43	2384.58	-2279.63	-861.03	2.79	444107.70	696622.92	N 32 13 11.75	W 103 49 52.30
	11985.00	89.18	181.44	9989.17	2479.06	-2374.47	-865.94	3.23	444012.86	696618.02	N 32 13 10.81	W 103 49 52.36
	12079.00	89.62	182.05	9990.15	2572.34	-2468.43	-868.80	0.80	443918.92	696615.16	N 32 13 9.88	W 103 49 52.40
	12174.00	90.45	182.25	9990.09	2666.70	-2563.38	-872.38	0.90	443823.99	696611.59	N 32 13 8.95	W 103 49 52.45
	12268.00	90.76	181.50	9989.10	2760.00	-2657.30	-875.44	0.86	443730.05	696608.52	N 32 13 8.02	W 103 49 52.49
	12363.00	90.62	181.70	9987.96	2854.25	-2752.28	-878.09	0.26	443635.10	696605.87	N 32 13 7.08	W 103 49 52.52
	12457.00	91.17	181.56	9986.49	2947.50	-2846.21	-880.76	0.60	443541.18	696603.19	N 32 13 6.15	W 103 49 52.56
	12551.00	90.83	182.29	9984.85	3040.81	-2940.14	-883.92	0.86	443447.23	696600.04	N 32 13 5.22	W 103 49 52.60
	12646.00	90.41	181.87	9983.82	3135.15	-3035.07	-887.37	0.63	443352.31	696596.59	N 32 13 4.28	W 103 49 52.65
	12740.00	90.45	179.26	9983.11	3228.16	-3129.05	-888.30	2.78	443258.33	696595.66	N 32 13 3.35	W 103 49 52.66
	12835.00	90.52	180.15	9982.31	3321.96	-3224.05	-887.81	0.94	443163.34	696596.15	N 32 13 2.41	W 103 49 52.66
	12929.00	90.48	179.18	9981.49	3414.77	-3318.04	-887.26	1.03	443069.35	696596.70	N 32 13 1.48	W 103 49 52.66
	13023.00	90.62	178.65	9980.59	3507.36	-3412.02	-888.48	0.58	442975.38	696598.48	N 32 13 0.55	W 103 49 52.64
	13118.00	90.58	178.82	9979.59	3600.89	-3506.99	-889.38	0.18	442880.41	696600.58	N 32 12 59.61	W 103 49 52.62
	13212.00	90.88	179.23	9978.33	3693.52	-3600.97	-891.78	0.59	442786.44	696602.18	N 32 12 58.68	W 103 49 52.61
	13307.00	90.76	179.42	9976.90	3787.21	-3695.95	-893.68	0.29	442691.47	696603.30	N 32 12 57.74	W 103 49 52.60
	13401.00	90.58	179.31	9975.80	3879.93	-3789.94	-895.62	0.22	442597.49	696604.34	N 32 12 56.81	W 103 49 52.60
	13495.00	90.72	178.84	9974.74	3972.57	-3883.92	-898.10	0.52	442503.51	696605.85	N 32 12 55.88	W 103 49 52.58
	13590.00	90.58	179.25	9973.68	4066.19	-3978.90	-898.52	0.46	442408.54	696607.44	N 32 12 54.94	W 103 49 52.57
	13684.00	91.00	179.28	9972.36	4158.88	-4072.89	-899.31	0.45	442314.56	696608.64	N 32 12 54.01	W 103 49 52.56
	13778.00	91.03	179.62	9970.70	4251.62	-4166.87	-899.41	0.36	442220.58	696609.55	N 32 12 53.08	W 103 49 52.56
	13967.00	91.24	179.64	9966.98	4436.16	-4355.83	-899.19	0.11	442031.64	696610.77	N 32 12 51.21	W 103 49 52.55
	14062.00	90.72	178.24	9965.33	4531.74	-4450.79	-899.43	1.57	441936.68	696612.52	N 32 12 50.27	W 103 49 52.54
	14156.00	91.93	178.52	9963.16	4624.16	-4544.73	-900.78	1.32	441842.75	696615.18	N 32 12 49.34	W 103 49 52.51
	14250.00	90.82	177.95	9960.90	4716.54	-4638.65	-902.86	1.33	441748.83	696618.07	N 32 12 48.41	W 103 49 52.48
	14345.00	90.62	179.25	9959.71	4810.02	-4733.62	-903.56	1.36	441653.87	696620.39	N 32 12 47.47	W 103 49 52.48
	14439.00	91.45	179.24	9958.01	4902.70	-4827.59	-902.32	0.88	441559.90	696621.63	N 32 12 46.54	W 103 49 52.49
	14628.00	90.62	179.09	9954.60	5089.00	-5016.54	-902.57	0.45	441370.97	696624.39	N 32 12 44.67	W 103 49 52.43
	14817.00	90.00	178.19	9953.57	5275.03	-5205.48	-905.08	0.58	441182.04	696628.87	N 32 12 42.80	W 103 49 52.39
	14911.00	90.07	178.51	9953.52	5367.46	-5299.44	-906.38	0.35	441088.08	696631.58	N 32 12 41.87	W 103 49 52.36
	15005.00	90.17	178.49	9953.32	5459.95	-5393.41	-907.92	0.11	440994.12	696634.04	N 32 12 40.94	W 103 49 52.34
Final MWD Survey	15038.00	90.14	178.47	9953.24	5492.45	-5426.40	-908.09	0.12	440963.13	696634.88	N 32 12 40.63	W 103 49 52.33
Proj. to Bit	15077.00	90.14	178.47	9953.14	5530.78	-5465.38	-908.00	0.00	440922.15	696635.95	N 32 12 40.23	W 103 49 52.32

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	28.500	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Nimitz MDP1 13 Federal Com 2H Gyro+MWD 0-15,077'
	1	28.500	28.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Nimitz MDP1 13 Federal Com 2H Gyro+MWD 0-15,077'
	1	28.500	10011.600	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Nimitz MDP1 13 Federal Com 2H
	1	10011.600	15077.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Nimitz MDP1 13 Federal Com 2H

Final PvA - Rev1 H&P 656 (RKB=26.5')

Schlumberger

OXY

Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Nimitz MDP1 13 Federal Com 2H	NM Eddy County (NAD 83)	Oxy Nimitz MDP1 13 Federal Com 2H

Gravity & Magnetic Parameters — Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet — Miscellaneous