

Schlumberger

Reservoir Development
Schlumberger Drilling and Measurements
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
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30-015-43809

Well Reference:
22, 24S, 29E, Eddy NM
-32.20710 -103.97520

I, Blake Jones certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of July 25, 2016 through August 04, 2016, conduct or supervise the taking of the TelePacer & SlimPulse surveys from a depth of 26.5.00 feet to a depth of 16010.00 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 Cedar Canyon 22-15 Fee 31H Well (Original Hole) API No. 30-015-43809 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
Blake Jones
FS

[Signature] LERMAINE ALLEN on behalf
of BLAKE JONES

Subscribed and Sworn to before me this 18th day of August (month) 2016 (yr)

My Commission expires:

September 5, 2016

[Signature]

Notary Public

Midland, TX
(County State)



NM OIL CONSERVATION

ARTESIA DISTRICT

SEP 13 2016

RECEIVED



Final PVA Plan - Rev3

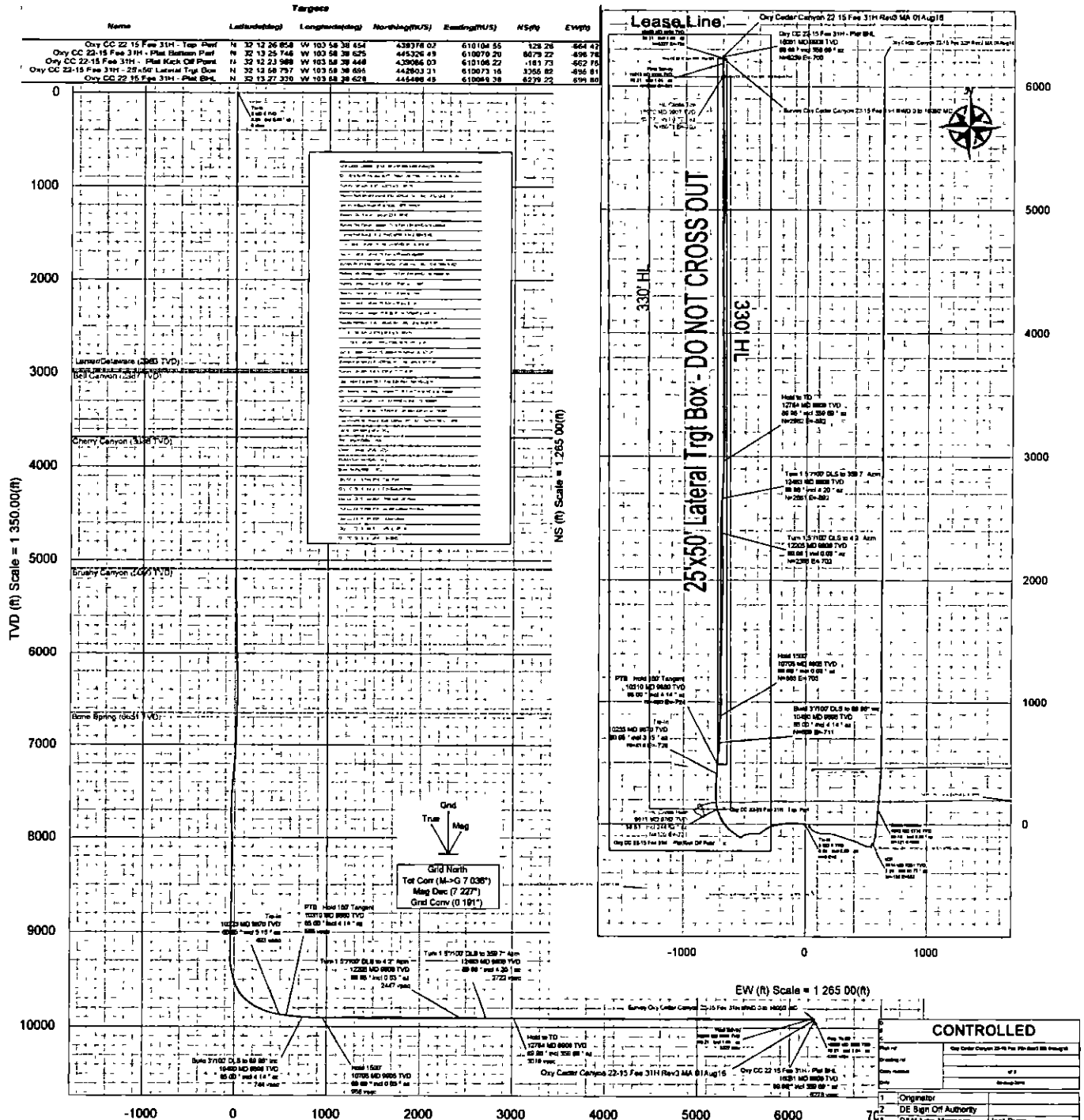
OXY

RKB 26.5ft

Schlumberger

Borehole: Oxy CC 22-15 Fee 31H - Original Borehole		Well: Oxy Cedar Canyon 22-15 Fee 31H		Field: NM Eddy County (NAD 27)		Structure: H&P 836	
Model: H008 31H	Dep: 69.61"	Date: 23-Jul-2014	Location: NAD27 New Mexico State Plane, Eastern Zone, US Feet	Lat: N 32 12 25.57	Long: W 103 58 38.73	Scale: 1:1000	Sheet: Oxy Cedar Canyon 22-15 Fee 31H - Plat B&C
MagDec: 7.227	FE: 42276.03967	Gravity: 9.8	Source: 617708.82718	Scale: 1:1000	Scale: 1:1000	Scale: 1:1000	Plan: Oxy Cedar Canyon 22-15 Fee 31H - Plat B&C

Critical Points											
Comments	Survey MD(ft)	Inclination(deg)	Azimuth(deg)	TVD(ft)	Sub-Sea TVD	VS(ft)	NS(ft)	EW(ft)	Latitude(deg)	Longitude(deg)	Easting(ftUS)
Tie-In	10233.00	80.95	3.15	9870.44	6918.14	492.65	414.05	-728.42	N 32 12 29.688	W 103 58 39.188	610040.56
PTB - Hold 180° Tangent	10310.00	85.00	4.14	9879.86	6927.56	567.88	490.30	-723.56	N 32 12 30.443	W 103 58 39.129	610045.42
Build 3°/100' DLS to 89.96° Inc	10490.00	85.00	4.14	9895.55	6943.25	744.17	669.15	-710.61	N 32 12 32.212	W 103 58 38.971	610058.36
Hold 1500'	10704.61	89.96	0.03	9904.98	6952.68	956.11	883.30	-702.83	N 32 12 34.331	W 103 58 38.872	610066.15
Turn 1.5°/100' DLS to 4.2° Azm	12204.61	89.96	0.03	9906.03	6953.73	2446.68	2383.30	-702.04	N 32 12 49.174	W 103 58 38.805	610066.93
Turn 1.5°/100' DLS to 359.7° Azm	12482.61	89.96	4.20	9906.23	6953.93	2721.56	2661.05	-691.79	N 32 12 51.922	W 103 58 38.675	610077.19
Hold to TD	12783.59	89.96	359.69	9906.45	6954.15	3019.29	2961.78	-681.59	N 32 12 54.897	W 103 58 38.545	610087.39
Oxy CC 22-15 Fee 31H - Plat B&C	16061.08	89.96	359.69	9909.00	6956.70	6278.32	6239.22	-699.60	N 32 12 57.330	W 103 58 38.628	610069.38



Survey Oxy Cedar Canyon 22-15 Fee 31H MWD 0 to 16050' MD Survey

Geodetic Report

(Def Survey)



Report Date:	August 09 2016 - 01:05 PM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	OXY	Vertical Section Azimuth:	353 602 ° (Grid North)
Field:	NM Eddy County (NAD 27)	Vertical Section Origin:	0 000 ft. 0 000 ft
Structure / Stof:	Oxy Cedar Canyon 22-15 Fee 31H / Oxy Cedar Canyon 22-15 Fee 31H	TVD Reference Datum:	RKB
Well:	Oxy Cedar Canyon 22-15 Fee 31H	TVD Reference Elevation:	2952 300 ft above MSL
Borehole:	Oxy CC 22-15 Fee 31H - Original Borehole	Seabed / Ground Elevation:	2925 800 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	7 227 °
Survey Name:	Survey Oxy Cedar Canyon 22-15 Fee 31H MWD 0 to 16050' MD	Total Gravity Field Strength:	958 4696mg (9 80665 Based)
Survey Date:	July 23, 2016	Gravity Model:	GARM
Tort / AHD / DDI / ERD Ratio:	245 121 ° / 6994 850 ft / 6 443 / 0 706	Total Magnetic Field Strength:	48220 438 nT
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	60 061 °
Location Lat / Long:	N 32° 12' 25.56697", W 103° 58' 30.72858"	Declination Date:	July 23, 2016
Location Grid N/E Y/X:	N 439247 750 HUS, E 610768 920 HUS	Magnetic Declination Model:	HDM 2018
CRS Grid Convergence Angle:	0 1909 °	North Reference:	Grid North
Grid Scale Factor:	0.99992314	Grid Convergence Used:	0 1909 °
Version / Patch:	2 0 365 0	Total Corr Mag North->Grid North:	7 0360 °

Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie-In	0.00	0.00	0.00	0.00	-2952.30	0.00	0.00	0.00	N/A	439247.75	610768.92	N 32 12 25.57	W 103 58 30.73
	26.50	0.00	0.00	26.50	-2925.80	0.00	0.00	0.00	0.00	439247.75	610768.92	N 32 12 25.57	W 103 58 30.73
	304.00	1.69	158.50	303.96	-2648.34	-3.95	-3.81	1.50	0.61	439243.94	610770.42	N 32 12 25.53	W 103 58 30.71
	336.00	1.85	223.02	335.95	-2618.35	-4.71	-4.58	1.36	5.57	439243.17	610770.28	N 32 12 25.52	W 103 58 30.71
	397.00	1.60	215.43	396.82	-2555.38	-5.01	-5.02	0.27	0.36	439241.83	610769.19	N 32 12 25.51	W 103 58 30.72
	426.00	1.12	324.21	427.62	-2524.38	-5.97	-6.03	-0.16	7.19	439241.72	610768.78	N 32 12 25.51	W 103 58 30.73
	515.00	1.30	290.32	514.90	-2437.40	-4.79	-4.98	-1.59	0.83	439242.76	610767.33	N 32 12 25.52	W 103 58 30.75
	607.00	1.58	288.70	606.87	-2345.43	-3.82	-4.27	-3.78	0.32	439243.48	610765.14	N 32 12 25.52	W 103 58 30.77
	789.00	2.42	254.31	788.76	-2163.54	-1.48	-2.80	-0.91	0.48	439245.15	610759.02	N 32 12 25.54	W 103 58 30.84
	881.00	0.26	290.18	880.73	-2071.57	-0.70	-2.04	-11.98	2.35	439245.71	610756.94	N 32 12 25.55	W 103 58 30.87
	971.00	0.22	115.28	970.73	-1981.57	-0.70	-2.05	-12.02	0.53	439248.70	610756.90	N 32 12 25.55	W 103 58 30.87
	1062.00	0.13	72.33	1061.73	-1890.57	-0.77	-2.09	-11.76	0.17	439245.68	610757.16	N 32 12 25.55	W 103 58 30.86
	1255.00	0.13	356.00	1254.73	-1887.57	-0.51	-1.81	-11.57	0.08	439245.94	610757.35	N 32 12 25.55	W 103 58 30.86
	1350.00	0.09	10.62	1349.73	-1802.57	-0.33	-1.63	-11.56	0.05	439248.13	610757.38	N 32 12 25.55	W 103 58 30.86
	1444.00	0.15	307.29	1443.73	-1508.57	-0.17	-1.46	-11.65	0.14	439248.27	610757.27	N 32 12 25.55	W 103 58 30.86
	1538.00	0.22	150.26	1538.73	-1413.57	-0.25	-1.58	-11.66	0.38	439246.19	610757.27	N 32 12 25.55	W 103 58 30.86
	1634.00	0.35	188.75	1633.73	-1318.57	-0.70	-2.01	-11.60	0.23	439245.74	610757.32	N 32 12 25.55	W 103 58 30.86
	1729.00	0.18	148.37	1728.72	-1223.58	-1.12	-2.42	-11.55	0.26	439245.33	610757.37	N 32 12 25.54	W 103 58 30.88
	1824.00	0.13	251.69	1823.72	-1128.58	-1.27	-2.58	-11.57	0.28	439245.17	610757.35	N 32 12 25.54	W 103 58 30.88
	1918.00	0.26	264.78	1917.72	-1034.58	-1.29	-2.63	-11.86	0.15	439245.12	610757.04	N 32 12 25.54	W 103 58 30.88
	2013.00	0.37	298.94	2012.72	-939.58	-1.11	-2.50	-12.37	0.22	439245.25	610756.55	N 32 12 25.54	W 103 58 30.87
	2108.00	0.35	289.40	2107.72	-844.58	-0.80	-2.28	-12.91	0.07	439245.49	610756.01	N 32 12 25.55	W 103 58 30.88
	2203.00	0.26	333.07	2202.72	-749.58	-0.48	-1.97	-13.28	0.25	439245.78	610755.84	N 32 12 25.55	W 103 58 30.88
	2297.00	0.07	135.61	2296.72	-655.58	-0.32	-1.82	-13.34	0.35	439245.93	610755.58	N 32 12 25.55	W 103 58 30.88
	2392.00	0.20	220.57	2391.72	-560.58	-0.48	-1.99	-13.40	0.22	439245.76	610755.52	N 32 12 25.55	W 103 58 30.88
	2487.00	0.15	286.62	2486.72	-465.58	-0.58	-2.11	-13.64	0.16	439245.64	610755.28	N 32 12 25.55	W 103 58 30.89
	2582.00	0.15	22.00	2581.72	-370.58	-0.46	-2.00	-13.71	0.26	439245.75	610755.21	N 32 12 25.55	W 103 58 30.89
	2677.00	0.18	28.40	2676.72	-275.58	-0.23	-1.75	-13.60	0.04	439246.00	610755.32	N 32 12 25.55	W 103 58 30.88
	2772.00	0.29	74.93	2771.72	-180.58	-0.07	-1.56	-13.29	0.22	439246.19	610755.63	N 32 12 25.55	W 103 58 30.88
	2867.00	0.53	19.28	2866.72	-85.58	0.36	-1.08	-12.82	0.48	439246.67	610756.01	N 32 12 25.56	W 103 58 30.89
	2962.00	0.18	19.77	2961.71	9.41	0.89	-0.53	-12.72	0.37	439247.22	610756.20	N 32 12 25.56	W 103 58 30.87
	3057.00	0.18	208.26	3056.71	104.41	0.91	-0.52	-12.74	0.38	439247.23	610756.18	N 32 12 25.56	W 103 58 30.87
	3151.00	0.13	62.71	3150.71	168.41	0.82	-0.50	-12.72	0.32	439247.15	610756.21	N 32 12 25.56	W 103 58 30.87
	3246.00	0.15	264.74	3245.71	293.41	0.91	-0.52	-12.74	0.28	439247.23	610756.18	N 32 12 25.56	W 103 58 30.87
	3341.00	0.13	87.41	3340.71	388.41	0.94	-0.48	-12.75	0.29	439247.27	610756.17	N 32 12 25.56	W 103 58 30.88
	3436.00	0.15	263.60	3435.71	483.41	0.98	-0.45	-12.77	0.29	439247.30	610756.15	N 32 12 25.56	W 103 58 30.88
	3531.00	0.15	13.52	3530.71	578.41	1.30	-0.15	-12.95	0.11	439247.60	610755.97	N 32 12 25.57	W 103 58 30.88
	3626.00	0.13	48.69	3625.71	673.41	1.48	0.05	-12.84	0.09	439247.80	610756.08	N 32 12 25.57	W 103 58 30.88
	3721.00	0.15	358.27	3720.71	768.41	1.67	0.24	-12.77	0.12	439247.99	610756.15	N 32 12 25.57	W 103 58 30.88
	3816.00	0.15	293.87	3815.71	862.41	1.85	0.42	-12.89	0.17	439248.17	610756.04	N 32 12 25.57	W 103 58 30.88
	3911.00	0.09	25.82	3910.71	957.41	2.10	0.65	-13.05	0.09	439248.40	610755.87	N 32 12 25.57	W 103 58 30.88
	4006.00	0.13	82.14	4005.71	1052.41	2.21	0.77	-12.92	0.08	439248.52	610756.00	N 32 12 25.58	W 103 58 30.88
	4260.00	0.18	221.57	4260.71	1337.41	2.15	0.71	-12.92	0.32	439248.46	610756.00	N 32 12 25.57	W 103 58 30.88
	4384.00	0.20	51.31	4383.71	1431.41	2.13	0.70	-12.89	0.40	439248.45	610756.03	N 32 12 25.57	W 103 58 30.88
	4574.00	0.22	347.76	4573.71	1621.41	2.67	1.27	-12.71	0.12	439249.02	610756.21	N 32 12 25.58	W 103 58 30.87
	4784.00	0.22	12.92	4783.71	1811.41	3.38	1.98	-12.71	0.05	439249.73	610756.21	N 32 12 25.59	W 103 58 30.87
	4954.00	0.31	260.04	4953.71	2001.41	3.68	2.24	-13.13	0.23	439249.98	610755.79	N 32 12 25.59	W 103 58 30.88
	5049.00	0.59	284.80	5048.70	2086.40	3.69	2.15	-13.87	0.30	439249.90	610755.08	N 32 12 25.59	W 103 58 30.89
	5238.00	2.46	285.45	5237.63	2285.33	5.21	3.14	-16.75	1.02	439250.88	610750.17	N 32 12 25.60	W 103 58 30.94
	5333.00	2.94	280.74	5332.52	2380.22	6.69	4.14	-23.11	0.56	439251.88	610745.81	N 32 12 25.61	W 103 58 31.00
	5428.00	3.25	281.21	5427.39	2475.09	8.22	5.12	-28.15	0.33	439252.87	610740.78	N 32 12 25.62	W 103 58 31.05
	5523.00	3.79	278.20	5522.21	2569.91	9.83	6.09	-33.89	0.80	439253.84	610735.03	N 32 12 25.63	W 103 58 31.12
	5618.00	4.40	278.02	5616.96	2664.66	11.40	6.92	-40.63	0.88	439254.87	610728.30	N 32 12 25.64	W 103 58 31.20
	5713.00	5.38	274.44	5711.62	2758.32	13.02	7.65	-48.69	1.04	439255.40	610720.23	N 32 12 25.64	W 103 58 31.29
	5903.00	8.88	272.77	5900.53	2948.23	16.51	8.88	-68.91	0.78	439256.83	610700.02	N 32 12 25.66	W 103 58 31.53
	5967.00	8.84	273.85	5963.67	3041.37	18.66	9.63	-81.56	1.90	439257.38	610687.37	N 32 12 25.66	W 103 58 31.88
	6092.00	11.82	271.59	6087.17	3134.87	21.26	10.37	-88.25	3.16	439258.12	610670.68	N 32 12 25.67	W 103 58 31.87
	6187.00	14.22	268.98	6179.76	3227.48	23.66	10.43	-119.48	2.80	439258.18	610649.45	N 32 12 25.67	W 103 58 32.12
	6282.00	14.57	265.72	6271.78	3319.48	25.22	9.33	-143.06	0.93	439257.08	610625.87	N 32 12 25.68	W 103 58 32.38
	6377.00	15.01	264.05	6363.63	3411.33	25.75	7.17	-187.22	0.64	439254.91	610601.72	N 32 12 25.64	W 103 58 32.67
	6472.00	14.48	281.32	6455.51	3503.21	25.38	4.10	-191.19	0.92	439251.85	610577.74	N 32 12 25.61	W 103 58 32.95
	6567.00	14.39	258.15	6547.51	3595.21	23.78	-0.12	-214.49	0.84	439247.63	610554.45	N 32 12 25.57	W 103 58 33.22
	6756.00	11.82	255.31	6731.57	3779.27	18.76	-9.85	-256.20	1.40	439237.90	610512.74	N 32 12 25.48	W 103 58 33.71
	6851.00	10.95	254.00	6824.70	3872.40	15.85	-14.81	-274.29	0.88	439232.84	610494.65	N 32 12 25.43	W 103 58 33.92
	6945.00	9.76	248.99	6917.17	3984.87	12.31	-20.18	-290.28	1.82	439227.59	610478.85	N 32 12 25.38	W 103 58 34.11
	7040.00	6.15	242.58	7011.01	4058.71	7.82	-28.19	-303.77	1.87	439221.56	610465.17	N 32 12 25.32	W 103 58 34.26
	7135.00	7.14	238.97	7105.17	4152.87	2.95	-32.34	-314.81	1.18	439215.42	610454.13	N 32 12 25.26	W 103 58 34.39
	7230.00	9.01	232.09	7198.22	4248.92	-3.40	-39.95	-325.74	2.21	439207.80	610443.20	N 32 12 25.18	W 103 58 34.52
	7325.00	11.25	234.34	7292.74	4340.44	-11.82	-49.82	-339.14	2.39	439187.83	610429.81	N 32 12 25.08	W 103 58 34.68
	7420.00	9.98	<										

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	N9 (ft)	EW (ft)	DLS (ft/moon)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)
	8367.00	6.00	255.18	8324.85	5372.55	-27.42	-80.42	-471.07	1.35	439187.34	810297.89	N 32 12 24.78	W 103 58 36.21
	8452.00	5.93	258.33	8410.34	5467.04	-28.80	-82.88	-480.67	0.35	439185.08	810288.28	N 32 12 24.78	W 103 58 36.32
	8557.00	4.64	252.89	8513.94	5561.64	-29.77	-84.80	-489.15	1.46	439182.95	810279.81	N 32 12 24.74	W 103 58 36.42
	8651.00	4.53	252.08	8607.63	5655.33	-31.21	-87.06	-496.32	0.14	439180.69	810272.84	N 32 12 24.72	W 103 58 36.51
	8746.00	4.02	242.66	8702.37	5750.07	-33.15	-89.75	-502.85	0.91	439158.01	810268.11	N 32 12 24.70	W 103 58 36.58
	8841.00	3.47	235.43	8767.17	5844.87	-35.70	-92.91	-508.17	0.76	439154.85	810260.79	N 32 12 24.68	W 103 58 36.64
	8936.00	3.10	228.82	8892.01	5939.71	-38.52	-96.23	-512.47	0.56	439151.53	810258.49	N 32 12 24.63	W 103 58 36.69
	9030.00	2.88	230.05	8985.68	6033.58	-41.26	-99.42	-516.20	0.24	439148.34	810252.78	N 32 12 24.60	W 103 58 36.74
	9060.00	2.13	234.40	9045.83	6093.53	-42.68	-101.04	-518.28	1.29	439146.72	810250.70	N 32 12 24.58	W 103 58 36.78
	9235.00	4.08	241.78	9190.81	6238.31	-45.89	-105.05	-524.99	1.37	439142.71	810243.97	N 32 12 24.54	W 103 58 36.84
	9298.00	8.23	260.86	9253.24	6300.84	-48.94	-106.82	-531.42	7.28	439140.93	810237.54	N 32 12 24.53	W 103 58 36.82
	9391.00	15.21	304.14	9344.40	6392.10	-39.31	-101.02	-548.14	11.58	439148.74	810220.82	N 32 12 24.59	W 103 58 37.11
	9485.00	17.29	312.42	9434.85	6482.35	-20.77	-84.67	-568.87	3.31	439183.09	810200.30	N 32 12 24.75	W 103 58 37.35
	9578.00	26.02	303.37	9521.03	6568.73	2.73	-64.08	-595.98	10.02	439183.87	810173.00	N 32 12 24.95	W 103 58 37.68
	9673.00	34.88	313.66	9602.98	6650.68	38.87	-33.88	-633.01	10.60	439213.87	810135.96	N 32 12 25.25	W 103 58 38.10
	9766.00	45.34	324.97	9674.21	6721.91	88.39	11.68	-671.30	13.84	439259.41	810097.87	N 32 12 25.70	W 103 58 38.54
	9859.00	54.28	336.94	9734.29	6781.99	151.86	73.73	-705.21	13.72	439321.48	810063.76	N 32 12 26.32	W 103 58 38.93
	9952.00	61.85	348.81	9783.71	6831.41	229.11	148.91	-728.03	13.39	439396.65	810040.94	N 32 12 27.06	W 103 58 39.19
	10048.00	68.95	0.14	9823.07	6870.77	314.25	233.69	-735.99	13.41	439481.42	810032.99	N 32 12 27.90	W 103 58 39.28
	10140.00	75.68	3.12	9851.82	6899.32	402.88	323.15	-733.40	7.77	439570.87	810035.58	N 32 12 28.79	W 103 58 39.25
	10233.00	80.95	3.15	9870.44	6918.14	492.65	414.05	-728.42	5.67	439681.77	810040.56	N 32 12 29.89	W 103 58 39.19
	10327.00	84.18	2.96	9882.81	6930.31	584.58	507.12	-723.45	3.44	439754.83	810045.53	N 32 12 30.81	W 103 58 39.13
	10420.00	84.83	4.74	9891.51	6936.21	675.87	599.48	-717.23	2.03	439847.18	810051.74	N 32 12 31.52	W 103 58 39.05
	10514.00	85.28	3.88	9899.62	6947.32	767.89	682.86	-710.20	1.03	439940.56	810058.78	N 32 12 32.45	W 103 58 38.97
	10607.00	90.82	3.37	9902.94	6950.64	858.18	785.58	-704.32	5.77	440033.27	810064.65	N 32 12 33.38	W 103 58 38.89
	10701.00	89.66	4.01	9902.71	6950.41	951.72	879.39	-688.27	1.23	440127.07	810070.70	N 32 12 34.29	W 103 58 38.82
	10795.00	90.72	0.35	9902.40	6950.10	1044.85	973.30	-694.70	4.05	440220.97	810074.28	N 32 12 35.22	W 103 58 38.77
	10889.00	90.17	359.00	9901.87	6949.37	1138.12	1067.29	-695.23	1.55	440314.98	810073.74	N 32 12 36.15	W 103 58 38.78
	10982.00	89.90	358.49	9901.81	6949.31	1230.74	1160.27	-697.27	0.82	440407.93	810071.71	N 32 12 37.07	W 103 58 38.80
	11075.00	90.69	1.51	9901.13	6948.83	1323.15	1253.28	-697.27	3.38	440500.91	810071.71	N 32 12 37.69	W 103 58 38.79
	11262.00	90.52	0.41	9899.16	6948.88	1508.60	1440.22	-694.14	0.60	440687.86	810074.84	N 32 12 38.84	W 103 58 38.75
	11355.00	90.10	1.19	9898.86	6948.38	1600.88	1530.21	-692.84	0.95	440780.84	810078.14	N 32 12 40.78	W 103 58 38.73
	11448.00	90.28	1.11	9898.35	6948.05	1693.08	1628.19	-690.97	0.21	440873.81	810078.00	N 32 12 41.88	W 103 58 38.71
	11541.00	88.97	0.31	9898.98	6948.66	1785.34	1718.18	-688.82	1.65	440968.79	810079.18	N 32 12 42.80	W 103 58 38.69
	11634.00	89.59	1.51	9900.12	6947.82	1877.57	1812.16	-688.34	1.45	441059.76	810080.83	N 32 12 43.52	W 103 58 38.67
	11727.00	89.69	1.56	9900.71	6948.41	1968.88	1905.12	-685.85	0.12	441152.72	810083.12	N 32 12 44.44	W 103 58 38.64
	11821.00	89.93	0.58	9901.02	6948.72	2062.88	1999.10	-684.11	1.08	441246.89	810084.86	N 32 12 45.37	W 103 58 38.61
	11914.00	89.76	358.74	9901.27	6948.97	2155.36	2092.10	-684.68	1.87	441339.68	810084.29	N 32 12 46.29	W 103 58 38.61
	12008.00	89.72	358.97	9901.70	6949.40	2248.97	2168.08	-686.56	0.25	441433.65	810082.42	N 32 12 47.22	W 103 58 38.63
	12102.00	89.66	358.48	9902.21	6949.81	2342.59	2280.05	-688.65	0.53	441527.62	810080.32	N 32 12 48.15	W 103 58 38.65
	12196.00	89.38	358.69	9903.00	6950.70	2438.23	2374.02	-690.87	0.37	441621.58	810078.00	N 32 12 49.08	W 103 58 38.68
	12289.00	89.88	358.58	9903.61	6951.31	2528.87	2468.99	-693.19	0.53	441714.55	810075.79	N 32 12 50.00	W 103 58 38.70
	12383.00	90.38	2.36	9903.41	6951.11	2622.18	2560.97	-692.42	4.06	441808.52	810076.58	N 32 12 50.93	W 103 58 38.69
	12477.00	89.76	2.09	9903.30	6951.00	2715.12	2654.90	-688.77	0.72	441902.44	810080.21	N 32 12 51.86	W 103 58 38.64
	12570.00	90.10	1.82	9903.41	6951.11	2807.13	2747.84	-685.59	0.47	441995.38	810080.38	N 32 12 52.78	W 103 58 38.60
	12664.00	90.00	1.21	9903.33	6951.03	2900.23	2841.81	-683.11	0.66	442089.34	810085.87	N 32 12 53.71	W 103 58 38.57
	12757.00	89.83	1.93	9903.47	6951.17	2992.33	2934.77	-680.56	0.80	442182.29	810088.41	N 32 12 54.63	W 103 58 38.53
	12850.00	89.72	1.44	9903.83	6951.53	3084.41	3027.73	-677.83	0.54	442275.24	810091.15	N 32 12 55.55	W 103 58 38.50
	12944.00	89.78	1.19	9904.26	6951.96	3177.56	3121.71	-675.67	0.27	442369.21	810093.30	N 32 12 56.48	W 103 58 38.47
	13037.00	89.86	359.95	9904.57	6952.27	3269.87	3214.70	-674.74	1.34	442462.20	810094.23	N 32 12 57.40	W 103 58 38.48
	13130.00	89.35	359.81	9905.21	6952.91	3362.31	3307.70	-674.94	0.57	442555.19	810094.04	N 32 12 58.32	W 103 58 38.45
	13223.00	89.21	358.74	9906.38	6954.08	3454.84	3400.68	-675.11	1.18	442648.16	810092.88	N 32 12 59.24	W 103 58 38.46
	13317.00	89.31	359.87	9907.59	6955.29	3548.37	3494.87	-677.25	1.21	442742.14	810091.72	N 32 13 0.17	W 103 58 38.47
	13411.00	89.52	359.79	9908.55	6956.25	3641.81	3588.68	-677.53	0.24	442836.13	810091.44	N 32 13 1.10	W 103 58 38.47
	13504.00	89.83	359.77	9909.08	6956.78	3734.27	3681.68	-677.89	0.33	442929.12	810091.08	N 32 13 2.02	W 103 58 38.47
	13596.00	89.78	358.27	9909.41	6957.11	3825.78	3773.65	-678.88	0.55	443021.11	810090.31	N 32 13 2.93	W 103 58 38.48
	13690.00	89.59	358.55	9909.94	6957.64	3919.37	3867.63	-680.45	0.79	443115.08	810088.52	N 32 13 3.86	W 103 58 38.50
	13783.00	89.62	358.82	9910.58	6958.28	4012.02	3960.60	-682.75	0.08	443208.04	810088.23	N 32 13 4.78	W 103 58 38.52
	13876.00	89.48	359.08	9911.31	6959.01	4104.83	4053.58	-684.63	0.50	443301.01	810084.35	N 32 13 5.70	W 103 58 38.54
	13969.00	90.89	0.44	9911.01	6958.71	4197.09	4148.58	-685.03	2.12	443394.00	810083.94	N 32 13 6.62	W 103 58 38.54
	14063.00	90.38	359.11	9909.97	6957.67	4290.53	4240.57	-685.40	1.52	443487.98	810083.57	N 32 13 7.55	W 103 58 38.54
	14155.00	90.03	359.18	9909.84	6957.34	4382.10	4332.56	-686.78	0.39	443579.96	810082.20	N 32 13 8.46	W 103 58 38.55
	14249.00	90.31	359.83	9908.39	6957.06	4475.60	4426.65	-687.59	0.75	443673.95	810081.39	N 32 13 9.39	W 103 58 38.58
	14341.00	90.10	359.31	9909.04	6956.74	4567.10	4518.55	-688.28	0.61	443765.94	810080.70	N 32 13 10.30	W 103 58 38.58
	14434.00	90.38	359.06	9908.65	6956.35	4659.66	4611.54	-689.60	0.40	443858.92	810079.37	N 32 13 11.22	W 103 58 38.57
	14527.00	91.24	0.29	9907.33	6955.03	4752.13	4704.52	-690.13	1.61	443951.90	810078.85	N 32 13 12.14	W 103 58 38.58
	14621.00	90.72	0.41	9905.72	6953.42	4845.48	4798.51	-689.56	0.57	444045.88	810079.42	N 32 13 13.07	W 103 58 38.57
	14714.00	91.38	3.56	9904.02	6951.72	4937.44	4891.42	-688.34	3.46	444138.79	810082.84	N 32 13 13.99	W 103 58 38.53
	14808.00	90.45	0.43	9902.55	6950.25	5028.40	4983.34	-683.13	3.55	444230.70	810085.84	N 32 13 14.90	W 103 58 38.48
	14900.00	89.90	0.89	9902.26	6949.98	5121.72	5077.34	-682.05	0.78	444324.69	810086.92	N 32 13 15.83	W 103 58 38.47
	14993.00	89.24	359.27	9902.96	6950.66	5214.12	5170.33	-681.92	1.88	444417.67	8		