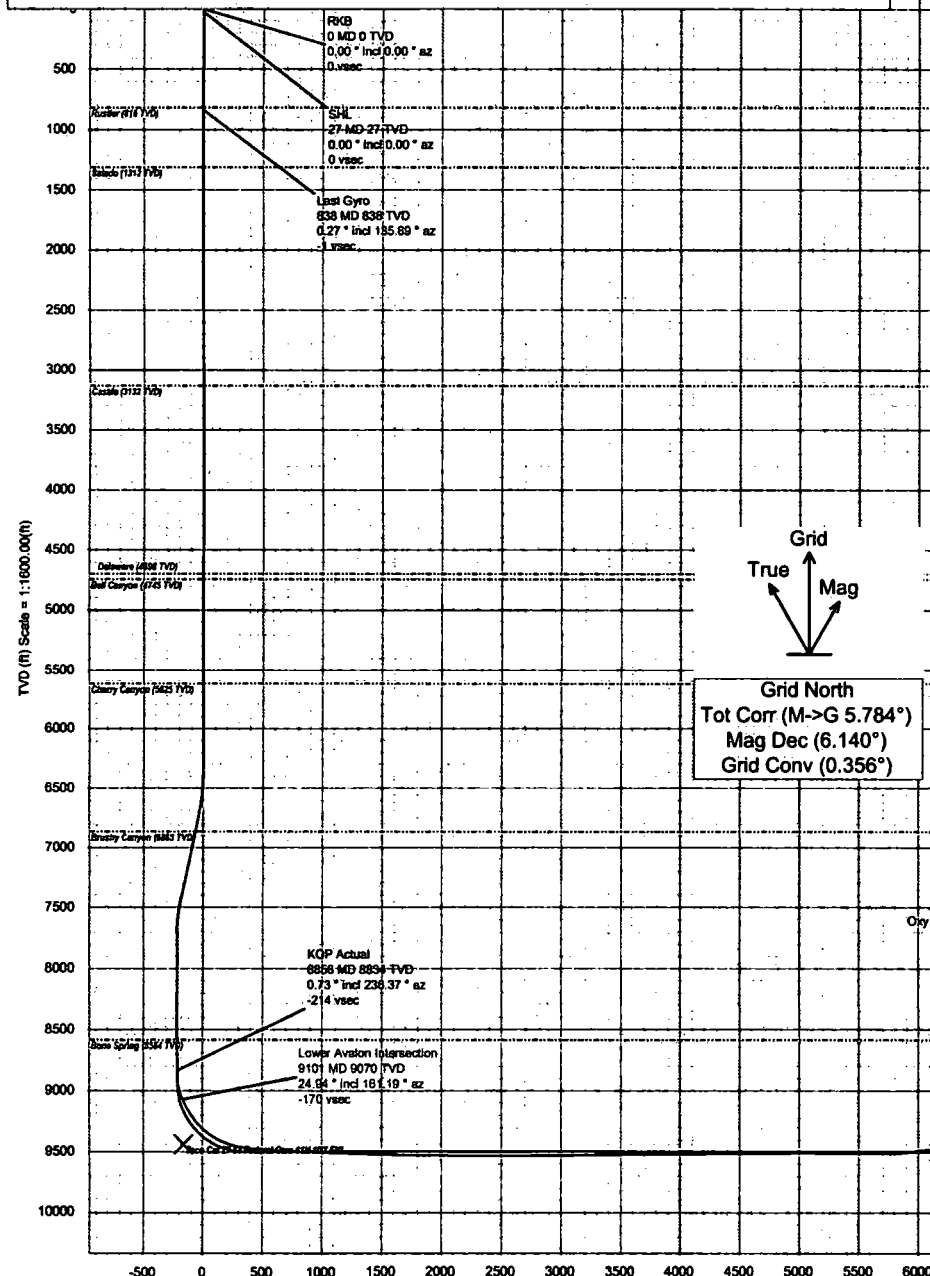


RECEIVED

Gravity & Magnetic Parameters			Surface Location			NAD83 New Mexico State Plane, Eastern Zone, US Feet			Miscellaneous			
Model:	IFR1	Dip: 60.187°	Date:	20-Nov-2018	Lat:	N 32 22 9.14	Northing:	436688.871US	Grid Covr:	0.339°	Qty	Taco Cat 27-
MagDec:	6.14°	FB: 48153.7nT	Gravity FB:	998.434mpn (9.80665 Based)	Lon:	W 103 40 6.04	Easting:	746847.783US	Scale Fact:	0.99995737	Stat:	34 Federal Con TVD Ref: RKB(2682.3R above MSL)
											11H	Plat: Qty Taco Cat 27-34 Federal Con 11H Gyro + BWD 0-10732MD



Vertical Section (ft) Azim = 179.12° Scale = 1:1600.00(ft) Origin = 0N/S, 0E/W



Oxy Taco Cat 27-34 Federal Com 11H Gyro + MWD 0-19732' MD Survey

Geodetic Report

(Def Survey)

Report Date: December 05, 2018 - 03:07 PM
 Client: OXY
 Field: NM Lea County (NAD 83)
 Structure / Slot: Oxy Taco Cat 27-34 Federal Com 11H / Oxy Taco Cat 27-34 Federal Com 11H
 Well: Taco Cat 27-34 Federal Com 11H
 Borehole: Original Borehole
 UWI / API#: Unknown / 30-025-44833
 Survey Name: Oxy Taco Cat 27-34 Federal Com 11H Gyro + MWD 0-19732' MD
 Survey Date: September 21, 2018
 Tort / AHD / DDI / ERD Ratio: 238.517' / 10783.351 ft / 6.726 / 1.130
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 22' 8.14270", W 103° 40' 8.04020"
 Location Grid N/E Y/X: N 488686.800 RUS, E 746647.779 RUS
 CRS Grid Convergence Angle: 0.3560°
 Grid Scale Factor: 0.99995737
 Version / Patch: 2.10.753.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 178.128° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3682.300 ft above MSL
 Seabed / Ground Elevation: 3635.800 ft above MSL
 Magnetic Declination: 6.140°
 Total Gravity Field Strength: 988.4542mgm (9.80685 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48155.700 nT
 Magnetic Dip Angle: 60.157°
 Declination Date: November 20, 2018
 Magnetic Declination Model: IFR1
 North Reference: Grid North
 Grid Convergence Used: 0.3560°
 Total Corr Mag North->Grid
 North: 5.7840°
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	488686.80	746647.78	N 32 22 9.14	W 103 40 6.04
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	488686.80	746647.78	N 32 22 9.14	W 103 40 6.04
	126.88	0.92	69.17	126.88	-0.28	0.29	0.75	0.92	488687.09	746648.53	N 32 22 9.15	W 103 40 6.03
	211.24	0.88	78.72	211.23	-0.59	0.62	1.88	0.34	488687.42	746649.64	N 32 22 9.15	W 103 40 6.02
	298.91	0.81	67.69	298.89	-0.86	0.90	2.79	0.15	488687.70	746650.57	N 32 22 9.15	W 103 40 6.01
	393.38	0.48	64.54	393.34	-1.20	1.25	3.60	0.16	488688.05	746651.38	N 32 22 9.15	W 103 40 6.00
	487.88	0.42	62.23	487.86	-1.51	1.58	4.25	0.05	488688.38	746652.02	N 32 22 9.16	W 103 40 5.99
	582.42	0.44	64.37	582.39	-1.82	1.90	4.88	0.03	488688.70	746652.66	N 32 22 9.16	W 103 40 5.98
	678.98	0.25	122.07	678.95	-1.86	1.94	5.38	0.39	488688.74	746653.16	N 32 22 9.16	W 103 40 5.98
	771.63	0.23	138.42	771.60	-1.60	1.69	5.68	0.08	488688.49	746653.46	N 32 22 9.16	W 103 40 5.97
	837.66	0.27	135.89	837.63	-1.39	1.48	5.88	0.06	488688.28	746653.66	N 32 22 9.16	W 103 40 5.97
	974.00	0.15	165.89	973.97	-0.98	1.08	6.15	0.12	488687.88	746653.93	N 32 22 9.15	W 103 40 5.97
	980.00	0.18	172.95	979.97	-0.97	1.06	6.15	0.60	488687.86	746653.93	N 32 22 9.15	W 103 40 5.97
	1072.00	0.04	113.61	1071.97	-0.81	0.90	6.20	0.18	488687.70	746653.98	N 32 22 9.15	W 103 40 5.97
	1249.00	0.04	183.57	1248.97	-0.72	0.82	6.25	0.03	488687.62	746654.03	N 32 22 9.15	W 103 40 5.97
	1340.00	0.04	43.88	1339.97	-0.71	0.81	6.27	0.08	488687.61	746654.05	N 32 22 9.15	W 103 40 5.97
	1521.00	0.05	71.93	1520.97	-0.78	0.88	6.39	0.01	488687.68	746654.17	N 32 22 9.15	W 103 40 5.97
	1813.00	0.05	320.19	1812.97	-0.82	0.92	6.40	0.09	488687.72	746654.18	N 32 22 9.15	W 103 40 5.97
	1802.00	0.05	341.91	1801.97	-0.97	1.06	6.32	0.01	488687.86	746654.10	N 32 22 9.15	W 103 40 5.97
	1896.00	0.05	305.18	1895.97	-1.03	1.13	6.28	0.03	488687.93	746654.06	N 32 22 9.15	W 103 40 5.97
	2085.00	0.08	122.99	2084.97	-1.00	1.10	6.32	0.07	488687.90	746654.10	N 32 22 9.15	W 103 40 5.97
	2179.00	0.01	213.70	2178.97	-0.96	1.06	6.37	0.09	488687.86	746654.15	N 32 22 9.15	W 103 40 5.97
	2274.00	0.12	149.39	2273.97	-0.87	0.97	6.42	0.12	488687.77	746654.20	N 32 22 9.15	W 103 40 5.97
	2368.00	0.08	143.37	2367.97	-0.73	0.83	6.51	0.04	488687.63	746654.28	N 32 22 9.15	W 103 40 5.96
	2463.00	0.01	199.17	2462.97	-0.67	0.77	6.54	0.08	488687.57	746654.32	N 32 22 9.15	W 103 40 5.96
	2558.00	0.01	205.00	2557.97	-0.65	0.75	6.54	0.00	488687.55	746654.31	N 32 22 9.15	W 103 40 5.96
	2652.00	0.06	51.03	2651.97	-0.68	0.78	6.57	0.07	488687.58	746654.35	N 32 22 9.15	W 103 40 5.96
	2747.00	0.08	72.58	2746.97	-0.73	0.83	6.67	0.03	488687.63	746654.45	N 32 22 9.15	W 103 40 5.96
	2842.00	0.04	155.11	2841.97	-0.71	0.82	6.75	0.09	488687.62	746654.53	N 32 22 9.15	W 103 40 5.96
	2938.00	0.08	90.60	2937.97	-0.68	0.79	6.83	0.08	488687.59	746654.61	N 32 22 9.15	W 103 40 5.96
	3031.00	0.06	38.95	3030.97	-0.72	0.83	6.93	0.07	488687.63	746654.70	N 32 22 9.15	W 103 40 5.96
	3125.00	0.09	114.30	3124.97	-0.73	0.83	7.02	0.10	488687.63	746654.80	N 32 22 9.15	W 103 40 5.96
	3220.00	0.07	57.57	3219.97	-0.73	0.83	7.14	0.08	488687.63	746654.82	N 32 22 9.15	W 103 40 5.96
	3314.00	0.09	74.51	3313.97	-0.77	0.89	7.26	0.03	488687.69	746655.04	N 32 22 9.15	W 103 40 5.96
	3409.00	0.08	74.62	3408.97	-0.81	0.92	7.40	0.01	488687.72	746655.17	N 32 22 9.15	W 103 40 5.95
	3504.00	0.05	109.88	3503.97	-0.81	0.93	7.50	0.05	488687.73	746655.28	N 32 22 9.15	W 103 40 5.95
	3693.00	0.04	168.16	3692.97	-0.72	0.83	7.59	0.02	488687.63	746655.37	N 32 22 9.15	W 103 40 5.95
	3788.00	0.09	138.49	3787.97	-0.63	0.75	7.65	0.06	488687.55	746655.43	N 32 22 9.15	W 103 40 5.95
	3882.00	0.08	117.21	3881.97	-0.55	0.66	7.76	0.03	488687.46	746655.54	N 32 22 9.15	W 103 40 5.95
	3977.00	0.04	92.15	3976.97	-0.51	0.63	7.85	0.05	488687.43	746655.63	N 32 22 9.15	W 103 40 5.95
	4071.00	0.09	67.48	4070.97	-0.54	0.66	7.95	0.06	488687.46	746655.73	N 32 22 9.15	W 103 40 5.95
	4166.00	0.12	104.32	4165.97	-0.54	0.66	8.12	0.08	488687.46	746655.90	N 32 22 9.15	W 103 40 5.95
	4261.00	0.14	72.08	4260.97	-0.55	0.67	8.33	0.08	488687.47	746656.10	N 32 22 9.15	W 103 40 5.94
	4355.00	0.08	75.90	4354.97	-0.60	0.73	8.50	0.06	488687.53	746656.28	N 32 22 9.15	W 103 40 5.94
	4450.00	0.07	287.40	4449.97	-0.60	0.73	8.51	0.16	488687.53	746656.28	N 32 22 9.15	W 103 40 5.94
	4838.00	0.11	273.78	4837.97	-0.59	0.72	8.21	0.03	488687.52	746656.99	N 32 22 9.15	W 103 40 5.94
	4827.00	0.05	144.10	4826.97	-0.54	0.66	8.08	0.08	488687.46	746656.86	N 32 22 9.15	W 103 40 5.95
	4922.00	0.04	293.84	4921.97	-0.52	0.64	8.07	0.09	488687.44	746656.85	N 32 22 9.15	W 103 40 5.95
	5016.00	0.05	170.99	5015.97	-0.49	0.61	8.05	0.08	488687.41	746656.83	N 32 22 9.15	W 103 40 5.95
	5111.00	0.46	104.28	5110.97	-0.35	0.48	8.42	0.48	488687.28	746656.20	N 32 22 9.15	W 103 40 5.94
	5205.00	0.06	240.18	5204.96	-0.23	0.37	8.73	0.53	488687.17	746656.51	N 32 22 9.15	W 103 40 5.94
	5300.00	0.01	340.52	5299.96	-0.22	0.35	8.89	0.07	488687.15	746656.47	N 32 22 9.15	W 103 40 5.94
	5395.00	0.08	289.40	5394.96	-0.24	0.37	8.84	0.06	488687.17	746656.42	N 32 22 9.15	W 103 40 5.94
	5489.00	0.04	21.19	5488.96	-0.29	0.42	8.60	0.08	488687.22	746656.38	N 32 22 9.15	W 103 40 5.94
	5679.00	0.05	138.12	5678.96	-0.29	0.42	8.68	0.04	488687.22	746656.48	N 32 22 9.15	W 103 40 5.94
	5774.00	0.08	181.46	5773.96	-0.19	0.32	8.71	0.06	488687.12	746656.49	N 32 22 9.15	W 103 40 5.94
	5863.00	0.08	290.58	5862.96	-0.11	0.24	8.58	0.07	488687.04	746656.38	N 32 22 9.14	W 103 40 5.94
	6057.00	0.08	310.31	6056.96	-0.17	0.30	8.47	0.03	488687.10	746656.25	N 32 22 9.15	W 103 40 5.94
	6152.00	0.08	278.33	6151.96	-0.23	0.35	8.35	0.05	488687.15	746656.13	N 32 22 9.15	W 103 40 5.94
	6246.00	0.05	347.41	6245.96	-0.27	0.40	8.28	0.08	488687.20	746656.06	N 32 22 9.15	W 103 40 5.94
	6341.00	0.06	335.19	6340.96	-0.36	0.49	8.25	0.02	488687.29	746656.03	N 32 22 9.15	W 103 40 5.94
	6435.00	2.61	28.39	6434.93	-2.20	2.34	9.21	2.83	488688.14	746656.99	N 32 22 9.17	W 103 40 5.93
	6530.00	5.91	29.89	6528.66	-8.22	8.41	12.64	3.58	488689.21	746660.41	N 32 22 9.23	W 103 40 5.89
	6624.00	9.47	28.97	6622.80	-19.09	19.38	18.80	3.79	488706.18	746666.57	N 32 22 9.33	W 103 40 5.82
	6719.00	12.75	28.94	6718.01	-34.97	35.39	27.66	3.45	488722.19	746675.43	N 32 22 9.49	W 103 40 5.72
	6813.00	12.70	28.43	6807.70	-53.15	53.72	37.27	0.59	488740.52	746685.05	N 32 22 9.67	W 103 40 5.60
	6908.00	13.04	22.59	6900.32	-72.26	72.97	46.04	0.97	488759.77	746693.82	N 32 22 9.86	W 103 40 5.50
	7002.00	13.34	20.74	6991.84	-82.07	82.90	53.95	0.55	488778.70	746701.73	N 32 22 10.06	W 103 40 5.40
	7097.00	12.43	18.63	7094.44	-111.90	112.84	61.10	1.08	488799.64	746708.88	N 32 22 10.26	W 103 40 5.32
	7191.00	12.31	15.99	7178.26	-131.03	132.06	67.09	0.61	488818.86	746714.87	N 32 22 10.45	W 103 40 5.25
	7286.00	12.59	13.58	7269.03	-150.74	151.86	72.31	0.62	488838.66	746720.09	N 32 22 10.64	W 103 40 5.19
	7381.00	12.85	12.30	7361.68	-171.13	172.33	77.01	0.48	488859.12	746724.79	N 32 22 10.84	W 103 40 5.13
	7465.00	12.66	8.25	7443.61	-189.32	190.56	80.33	1.18	488877.35	746728.10	N 32 22 11.02	W 103 40 5.09
	7559.00	9.04	3.23	7535.93	-206.78	208.06	82.21	3.87	488894.85	746729.99	N 32 22 11.20	W 103 40 5

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLB ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
----------	------------	-------------	------------------	-------------	--------------	------------	------------	------------------	--------------------	-------------------	-------------------------	--------------------------

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	26.500	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Taco Cat 27-34 Federal Com 11H Gyro + MWD 0-19732'MD
	1	26.500	26.500	Act Strs	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Taco Cat 27-34 Federal Com 11H Gyro + MWD 0-19732'MD
	1	26.500	837.660	Act Strs	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Taco Cat 27-34 Federal Com 11H Gyro + Original Borehole / Oxy Taco Cat
	1	837.660	19732.000	Act Strs	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Taco Cat 27-34 Federal Com 11H Gyro +

OXY USA INC
Taco Cat 27-34 Federal Com 11H
API No. 30-025-44933

17-1/2" hole @ 876'
13-3/8" csg @ 867'
w/ 800 sx-TOC-Surf Circ.

9-7/8" hole @ 8825'
7-5/8" csg @ 8810'
w/ 2225 sx-TOC--204' Calc.

6-3/4" hole @ 19732'
5-1/2" csg @ 19703'
w/ 705 sx-TOC--5800'-Calc.

Perfs @ 9445'-19621'

TD- 19732' M 9514' V

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

May 20, 2019

OXY USA INC
P.O. Box 4294
Houston, TX 77210-4294

Re:

27. 22S, 32E, Lea NM
N 32.3692063 W -103.6683445

CLIENT: OXY USA INC
WELL: Taco Cat 27-34 Federal Com 11H
FIELD: Red Tank Bone Spring

RIG: H&P 656
COUNTY: Lea
API NO: 30-025-44933
JOB NO: 18MLD3587

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-3 No. 754900).
Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Jody Bare FE	Taco Cat 27-34 Federal Com 11H Original Hole	974.00 Ft to 19687.00 Ft	November 9, 2018 to December 04, 2018	SlimPulse Third party corrected

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

Andrew Salomon
Field Service Manager

Schlumberger-Private

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:
27, 22S, 32E, Lea NM
N 32.3692063 W -103.6683445

I, Jody Bare certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of November 09, 2018 thru December 04, 2018, conduct or supervise the taking of the SlimPulse & Third party corrected surveys from a depth of 974.00 feet to a depth of 19687.00 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 Taco Cat 27-34 Federal Com 11H Well(Original Hole) API No. 30-025-44933 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
Jody Bare,
FE

Subscribed and Sworn to before me this 20th day of May (month) 2019 (yr)

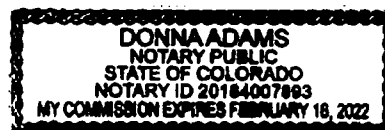
My Commission expires:

2-16-2022

D. Adams
Notary Public

(signature)

Adams County, Colorado
(County State)



Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLB (ft/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)
	8127.00	0.02	341.44	8103.28	-218.63	220.89	81.35	0.00	498907.68	746728.12	N 32 22 11.32	W 103 40 5.08
	8221.00	0.16	191.65	8197.28	-218.51	220.78	81.32	0.19	498907.57	746729.09	N 32 22 11.32	W 103 40 5.08
	8315.00	0.14	183.84	8291.28	-218.28	220.54	81.32	0.08	498907.33	746729.10	N 32 22 11.32	W 103 40 5.08
	8410.00	0.82	234.62	8386.27	-218.87	220.13	80.93	0.82	498906.92	746728.71	N 32 22 11.32	W 103 40 5.08
	8504.00	0.71	226.82	8480.27	-218.19	219.44	80.09	0.14	498906.23	746727.87	N 32 22 11.31	W 103 40 5.09
	8599.00	0.76	188.92	8575.26	-217.18	218.41	79.57	0.50	498905.20	746727.34	N 32 22 11.30	W 103 40 5.10
	8694.00	0.97	182.75	8670.25	-215.75	218.99	79.43	0.24	498903.78	746727.21	N 32 22 11.28	W 103 40 5.10
	8858.00	0.73	236.37	8834.23	-213.80	215.02	78.49	0.49	498901.81	746726.27	N 32 22 11.27	W 103 40 5.11
	8923.00	1.97	165.21	8899.22	-212.49	213.71	78.44	2.87	498900.50	746726.21	N 32 22 11.25	W 103 40 5.11
	9018.00	17.35	156.44	8992.58	-197.75	198.06	84.55	16.22	498885.85	746732.33	N 32 22 11.11	W 103 40 5.04
Lower Avalon Intersection	9101.05	24.94	161.19	9070.00	-169.62	171.09	95.16	9.36	498857.88	746742.94	N 32 22 10.83	W 103 40 4.92
	9113.00	26.04	161.68	9080.78	-164.72	168.22	96.80	9.36	498853.01	746744.57	N 32 22 10.78	W 103 40 4.90
	9123.50	26.63	163.98	9090.20	-160.25	161.77	98.17	11.23	498848.56	746745.85	N 32 22 10.74	W 103 40 4.88
	9207.00	32.44	179.00	9162.91	-119.70	121.30	103.75	11.23	498808.09	746751.53	N 32 22 10.34	W 103 40 4.82
	9302.00	38.38	180.15	9240.31	-84.69	66.28	104.12	6.29	498753.08	746751.89	N 32 22 8.79	W 103 40 4.82
	9397.00	47.87	182.44	9309.68	0.00	1.56	102.54	9.91	498688.36	746750.32	N 32 22 8.15	W 103 40 4.84
	9491.00	57.41	184.63	9368.79	74.29	-72.81	97.88	10.52	498613.99	746745.83	N 32 22 8.42	W 103 40 4.90
	9586.00	65.70	182.34	9412.01	157.51	-156.11	92.85	8.98	498530.70	746740.82	N 32 22 7.59	W 103 40 4.97
	9681.00	73.60	181.00	9445.02	246.42	-245.07	90.28	8.42	498441.74	746738.06	N 32 22 6.71	W 103 40 5.01
	9776.00	81.71	178.64	9465.31	339.13	-337.79	90.60	8.87	498349.02	746738.38	N 32 22 5.79	W 103 40 5.01
	9870.00	81.57	177.16	9478.98	432.11	-430.73	94.01	1.56	498256.09	746741.78	N 32 22 4.88	W 103 40 4.98
	9965.00	87.27	176.84	9488.22	526.55	-525.11	98.96	6.01	498161.72	746746.73	N 32 22 3.94	W 103 40 4.92
	10013.00	88.58	176.12	9489.95	574.47	-572.98	101.90	3.11	498113.84	746749.68	N 32 22 3.47	W 103 40 4.89
	10105.00	88.25	177.22	9492.50	668.35	-664.79	107.24	1.25	498022.04	746755.02	N 32 22 2.56	W 103 40 4.84
	10200.00	87.73	181.78	9495.83	761.28	-759.70	108.07	4.83	497927.13	746755.85	N 32 22 1.62	W 103 40 4.84
	10388.00	88.35	183.86	9502.26	948.75	-947.36	98.83	1.15	497739.49	746746.60	N 32 21 59.76	W 103 40 4.96
	10483.00	87.97	182.95	9505.31	1043.44	-1042.14	93.19	1.04	497644.71	746740.98	N 32 21 58.83	W 103 40 5.03
	10577.00	88.25	183.40	9508.41	1137.15	-1135.94	87.99	0.58	497550.91	746735.76	N 32 21 57.90	W 103 40 5.10
	10671.00	87.97	184.40	9511.51	1230.77	-1229.67	81.60	1.10	497457.18	746728.37	N 32 21 56.97	W 103 40 5.18
	10768.00	88.21	184.72	9514.68	1325.29	-1324.32	74.05	0.42	497362.54	746721.82	N 32 21 56.03	W 103 40 5.27
	10864.00	88.68	179.73	9519.82	1512.89	-1512.05	66.75	2.68	497174.82	746714.53	N 32 21 54.18	W 103 40 5.37
	11048.00	89.04	180.78	9521.70	1608.85	-1606.03	68.34	1.19	497080.85	746714.11	N 32 21 53.25	W 103 40 5.38
	11143.00	88.90	180.32	9523.41	1701.80	-1701.01	65.42	0.51	496985.87	746713.20	N 32 21 52.31	W 103 40 5.40
	11331.00	89.62	179.63	9525.84	1889.77	-1888.99	65.51	0.53	496797.90	746713.28	N 32 21 50.45	W 103 40 5.41
	11428.00	89.45	179.73	9526.61	1984.78	-1983.98	66.04	0.21	496702.91	746713.81	N 32 21 49.51	W 103 40 5.41
	11520.00	89.59	179.23	9527.40	2078.75	-2077.98	66.89	0.55	496608.92	746714.67	N 32 21 48.58	W 103 40 5.41
	11710.00	89.86	177.08	9528.31	2268.71	-2267.88	73.01	1.14	496419.04	746720.78	N 32 21 46.70	W 103 40 5.35
	11899.00	90.14	176.79	9528.31	2457.57	-2456.59	83.11	0.21	496230.32	746730.89	N 32 21 44.83	W 103 40 5.25
	11993.00	90.28	176.49	9527.97	2551.48	-2550.43	88.62	0.35	496138.48	746738.40	N 32 21 43.90	W 103 40 5.19
	12088.00	90.11	177.32	9527.64	2646.41	-2645.29	93.75	0.89	496041.83	746741.53	N 32 21 42.96	W 103 40 5.14
	12182.00	90.31	176.34	9527.30	2740.33	-2739.14	98.95	1.06	495947.78	746748.72	N 32 21 42.03	W 103 40 5.09
	12278.00	90.68	177.22	9526.50	2834.25	-2832.99	104.23	1.01	495853.93	746752.00	N 32 21 41.10	W 103 40 5.03
	12371.00	90.42	177.03	9526.61	2928.18	-2927.87	108.89	0.32	495759.06	746756.77	N 32 21 40.17	W 103 40 4.98
	12468.00	90.17	176.14	9525.12	3024.15	-3022.78	113.00	1.20	495664.15	746760.77	N 32 21 39.23	W 103 40 4.94
	12560.00	90.79	176.88	9524.33	3118.14	-3116.74	115.44	1.03	495570.19	746763.21	N 32 21 38.30	W 103 40 4.92
	12655.00	90.93	176.57	9522.91	3213.13	-3211.72	118.73	0.74	495475.22	746764.50	N 32 21 37.36	W 103 40 4.91
	12844.00	90.52	176.96	9520.51	3402.11	-3400.69	119.15	0.39	495286.26	746768.92	N 32 21 35.49	W 103 40 4.90
	12939.00	90.79	176.42	9519.43	3497.10	-3495.68	121.32	0.64	495191.29	746769.10	N 32 21 34.55	W 103 40 4.88
	13034.00	90.62	176.93	9518.26	3592.09	-3590.63	123.52	0.57	495096.33	746771.29	N 32 21 33.61	W 103 40 4.88
	13128.00	90.68	176.14	9517.21	3686.08	-3684.59	125.92	0.84	495002.37	746773.69	N 32 21 32.68	W 103 40 4.84
	13223.00	90.55	177.90	9516.21	3781.06	-3779.53	129.20	0.28	494907.44	746776.98	N 32 21 31.74	W 103 40 4.81
	13317.00	90.48	176.47	9515.38	3875.04	-3873.48	132.18	0.81	494813.50	746779.95	N 32 21 30.81	W 103 40 4.78
	13506.00	89.93	179.00	9514.68	4064.03	-4062.43	138.35	0.40	494624.55	746784.13	N 32 21 28.94	W 103 40 4.74
	13695.00	90.73	180.73	9513.60	4253.01	-4251.42	138.60	1.01	494435.57	746784.57	N 32 21 27.07	W 103 40 4.75
	13884.00	90.35	180.37	9511.81	4441.94	-4440.40	134.98	0.28	494248.80	746782.78	N 32 21 25.20	W 103 40 4.79
	14073.00	90.38	179.91	9510.61	4630.90	-4629.39	134.52	0.24	494057.81	746782.30	N 32 21 23.33	W 103 40 4.81
	14263.00	90.21	181.72	9509.35	4820.81	-4819.38	131.82	0.95	493867.85	746779.59	N 32 21 21.45	W 103 40 4.85
	14452.00	90.38	180.67	9508.38	5009.87	-5008.31	127.55	0.46	493678.71	746775.32	N 32 21 19.58	W 103 40 4.92
	14641.00	89.38	180.70	9508.05	5198.59	-5197.29	124.96	0.45	493489.74	746772.73	N 32 21 17.71	W 103 40 4.96
	14831.00	89.68	180.34	9510.65	5388.53	-5387.27	123.23	0.24	493299.77	746771.01	N 32 21 15.83	W 103 40 4.99
	15020.00	89.58	180.12	9511.93	5577.49	-5576.27	122.48	0.13	493110.78	746770.25	N 32 21 13.96	W 103 40 5.02
	15115.00	88.88	182.98	9513.23	5672.38	-5671.21	119.91	3.09	493015.84	746767.68	N 32 21 13.02	W 103 40 5.05
	15210.00	90.97	187.17	9513.35	5766.84	-5765.82	111.51	4.93	492921.24	746769.28	N 32 21 12.08	W 103 40 5.16
	15304.00	95.52	186.98	9508.03	5859.77	-5858.93	99.95	4.84	492828.14	746747.72	N 32 21 11.18	W 103 40 5.30
	15399.00	97.45	184.15	9497.30	5953.55	-5952.86	90.79	3.59	492734.21	746738.57	N 32 21 10.24	W 103 40 5.41
	15493.00	96.90	181.51	9485.58	6046.61	-6045.00	86.19	2.85	492641.07	746733.96	N 32 21 9.31	W 103 40 5.47
	15588.00	94.27	176.74	9476.31	6141.12	-6140.53	85.18	3.33	492546.54	746732.94	N 32 21 8.38	W 103 40 5.49
	15682.00	89.00	176.78	9473.63	6235.02	-6234.41	88.02	6.43	492452.67	746735.79	N 32 21 7.45	W 103 40 5.47
	15777.00	87.11	177.12	9476.85	6329.90	-6329.21	93.07	2.02	492357.87	746740.84	N 32 21 6.51	W 103 40 5.41
	15871.00	86.97	177.55	9481.71	6423.72	-6422.98	97.43	0.48	492264.10	746745.21	N 32 21 5.58	W 103 40 5.37
	15966.00	88.01	177.90	9485.87	6518.60	-6517.82	101.20	1.15	492169.27	746748.97	N 32 21 4.64	W 103 40 5.33
	16061.00	86.48	176.64	9480.45	6613.44	-6612.59	105.72	2.10	492074.50	746753.49	N 32 21 3.71	W 103 40 5.29
	16156.00	86.87	177.77	9495.98	6708.22	-6707.32	110.34	1.28	491979.78	746758.12	N 32 21 2.77	W 103 40 5.24
	16250.00	86.59	177.59	9501.34	6802.04	-6801.09	114.14	0.35	491886.01	746761.92	N 32 21 1.84	W 103 40 5.20
	16345.00	86.77	177.65	9506.84	6896.85	-6895.85	118.08	0.20	491791.26	746765.85	N 32 21 0.90	W 103 40 5.16
	16439.00	86.94	177.42	9512.00	6990.87	-6989.82	122.12	0.30	491697.49	746769.89	N 32 20 59.97	W 103 40 5.12
	16535.00	87.94	179.20									