

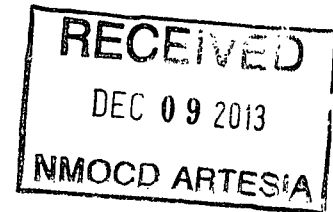
Schlumberger

Schlumberger Technology Corporation
1325 S Dairy Ashford, Rm 5012
Houston, TX 77077
281-285-6262

Date: October 23, 2013

To Whom It May Concern:

Company Name: Oxy USA WTP LP
RRC Lease/Gas ID: Not Assigned
Well Name: Piglet 21 State #028
County: Eddy
State: New Mexico
API number: 30-015-41175



Enclosed please find three original copies of the Continuous Direction Survey performed by Schlumberger Wireline & Testing and Data Services, divisions of Schlumberger Technology Corporation (P-5 No. 754900). The Continuous Directional Survey was calculated from GPIT Survey data, and processed by Elizabeth Rosborough, PetroTechnical Services located in DS-Houston. 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>
Elizabeth Rosborough Geology Tech	1	0 ft – 4975 ft	Oct. 23, 2013	GPIT

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address or call (281) 285-6262.

A handwritten signature in cursive script, appearing to read "Elizabeth Rosborough".

Elizabeth Rosborough
Geology Tech
Enclosures

Schlumberger

Piglet 21 State #028

General Information:

Company Name: Oxy USA WTP LP
Field: Artesia; Glorieta-Yoso
Well: Piglet 21 State #028
County: Eddy
State: New Mexico
Surface Location: 1511' FSL & 988' FWL
Latitude: 32.816475 deg N
Longitude: 104.185514 deg W
API Number: 30-015-41175
Logging Engineer: Ken Rod
Processed By: Elizabeth Rosborough
Service Order Number: CFNV-00059
Job Number: DSP-2013-12187
Date Logged: 11-Oct-2013
Date Processed: 23-Oct-2013

Bottom Hole Location:

Measured Depth	True Vertical Depth	North/South Drift	East/West Drift	Closure Distance	Closure Direction
Ft	Ft	Ft	Ft	Ft	Deg
4975	4974.82	-25.57	-5.14	26.08	191.37

Certified Directional Survey

0' MD - 4975' MD

*A Mark of Schlumberger

Using the following logs: GPIT-F



COMPANY: Oxy USA WTP LP
WELL: Piglet 21 State #028
FIELD: Artesia; Glorieta-Yeso
County: Eddy
State: New Mexico
COUNTRY: USA
Date Logged: 11-Oct-2013 **Date Processed:** 23-Oct-2013
Well Location: 1511' FSL & 988' FWL

Elevations: KB: 3633ft DF: 3632ft GL: 3619ft

API Number: 30-015-41175 **Job Number:** DSP-2013-12187

FOLD HERE ----- The well name, location and borehole reference data were furnished by the customer.

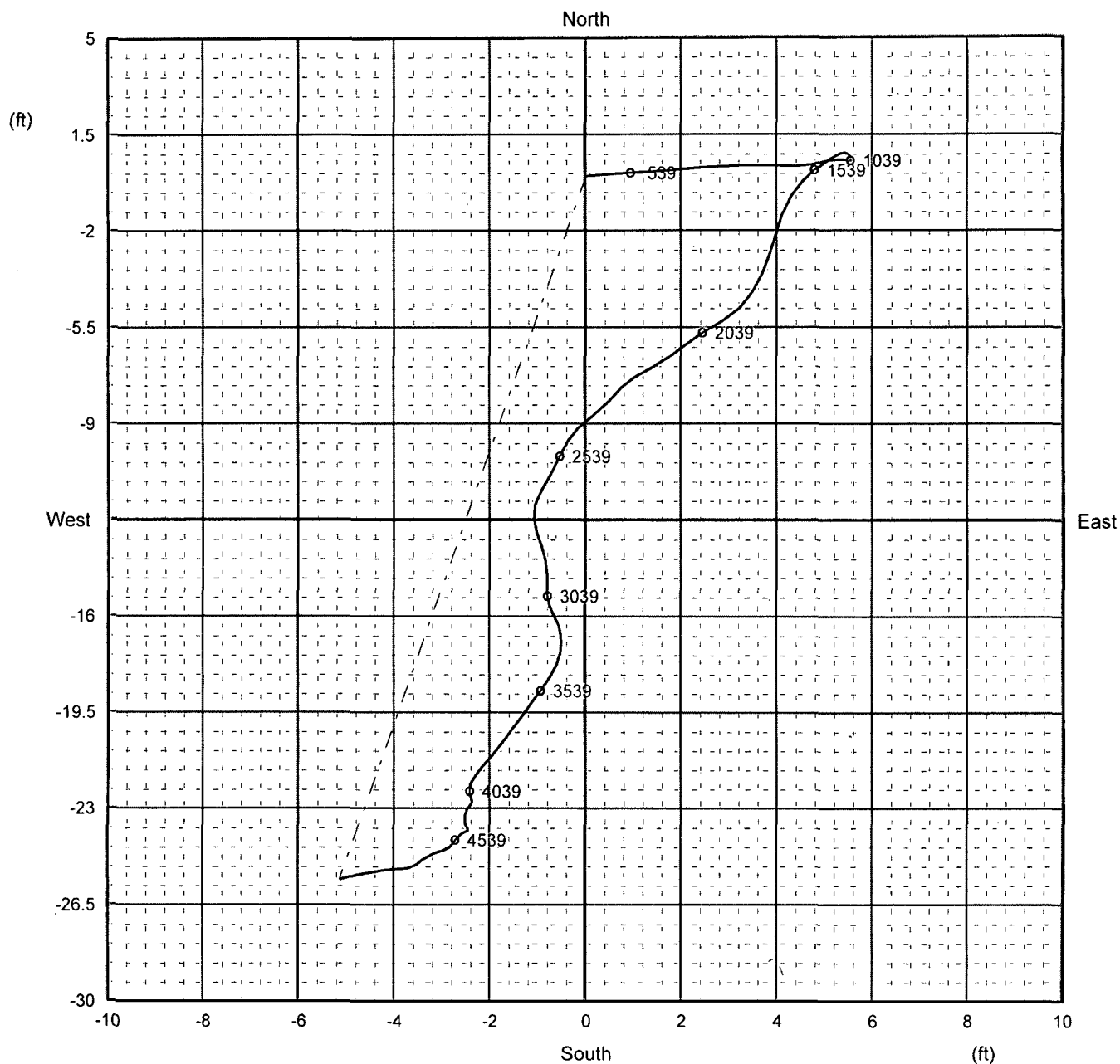
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Field Recording:	Location: Roswell, NM	Software Version: 20C0-999	Engineer: Ken Rood
Office Recording:	ICS Center: Houston	Baseline:	Log Analyst: E. Rosborough
Mud and Borehole Measurements:			
Rm @ Measured Temperature: 0.11ohm.m @ 59degF	BHT: 95.4degF	Bitsize: 7.875in	
Rmf @ Measured Temperature: 0.75ohm.m @ 59degF	Type Fluid in Hole:	Salt Brine	
Rmc @ Measured Temperature: @ 68degF	Mud Density: 10.3lbm/gal		

Remarks:

0' MD - 435' MD in Casing...Assumed Vertical
 GPIT Data Good at 539' MD
 Grid Convergence Angle = 0.441 deg

Piglet 21 State #028



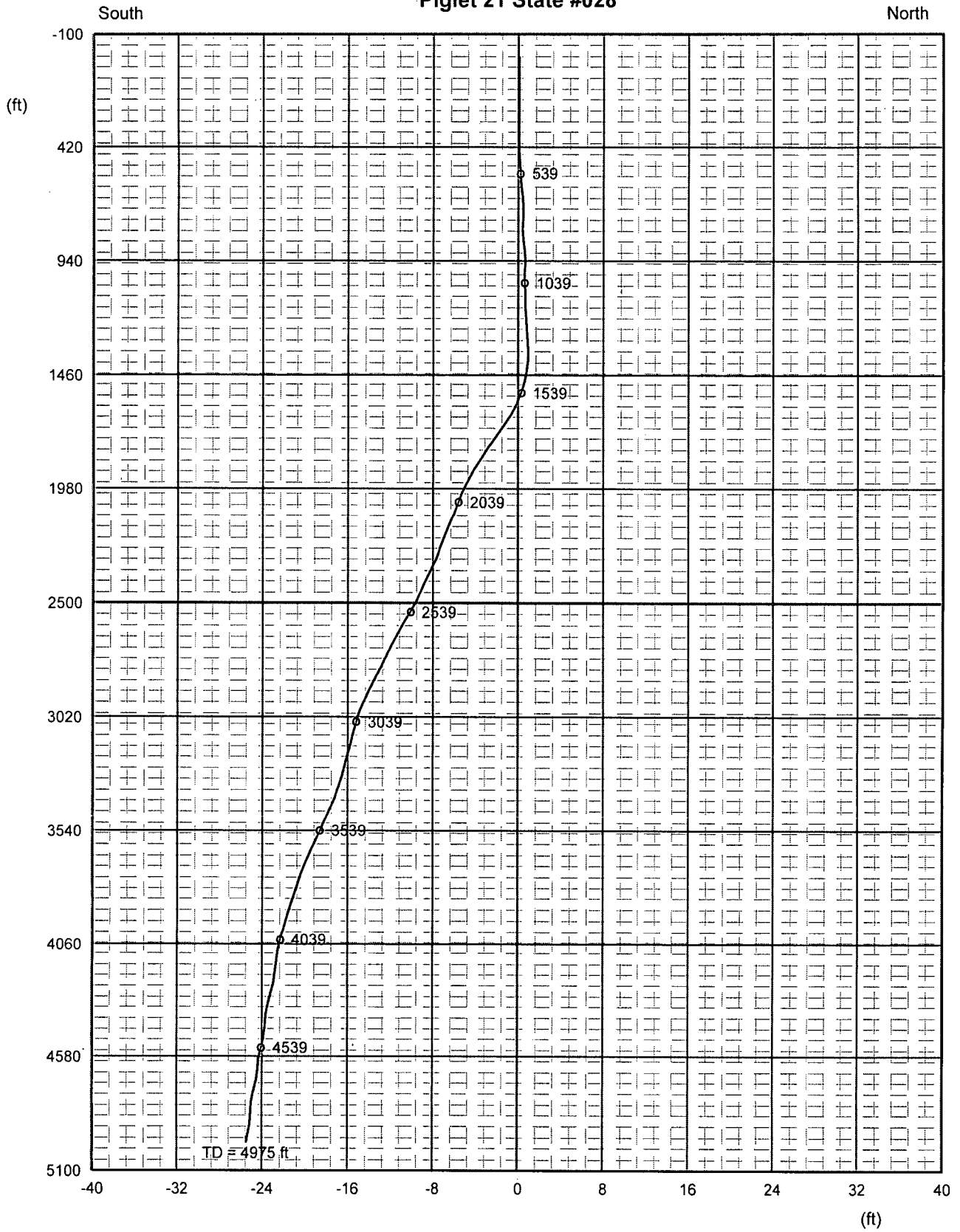
Projection on Horizontal Plane

Horizontal scale 1 in : 3 ft

Minimum Curvature Method

Tie In Location		Bottom Hole Location	
Measured Depth	0.00 ft	Measured Depth	4975.00 ft
True Vertical Depth	0.00 ft	True Vertical Depth	4974.82 ft
Distance North	0.00 ft	Distance North	-25.57 ft
Distance East	0.00 ft	Distance East	-5.14 ft
		Closure Distance	26.08 ft
		Closure Direction	191.37 deg

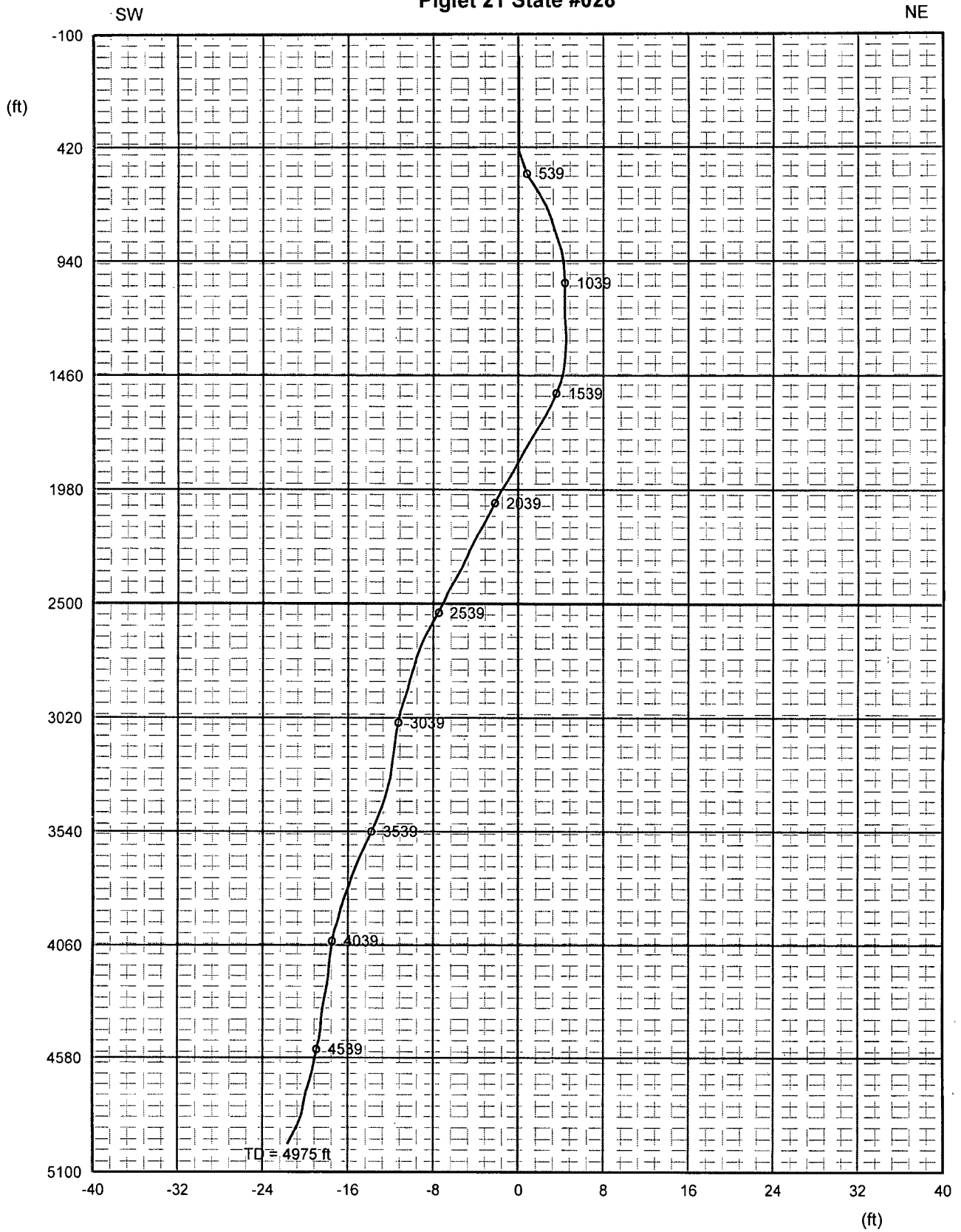
Piglet 21 State #028



Projection on Vertical Plane

Vertical scale 1 in : 650 , Horizontal scale 1 in : 13 ft

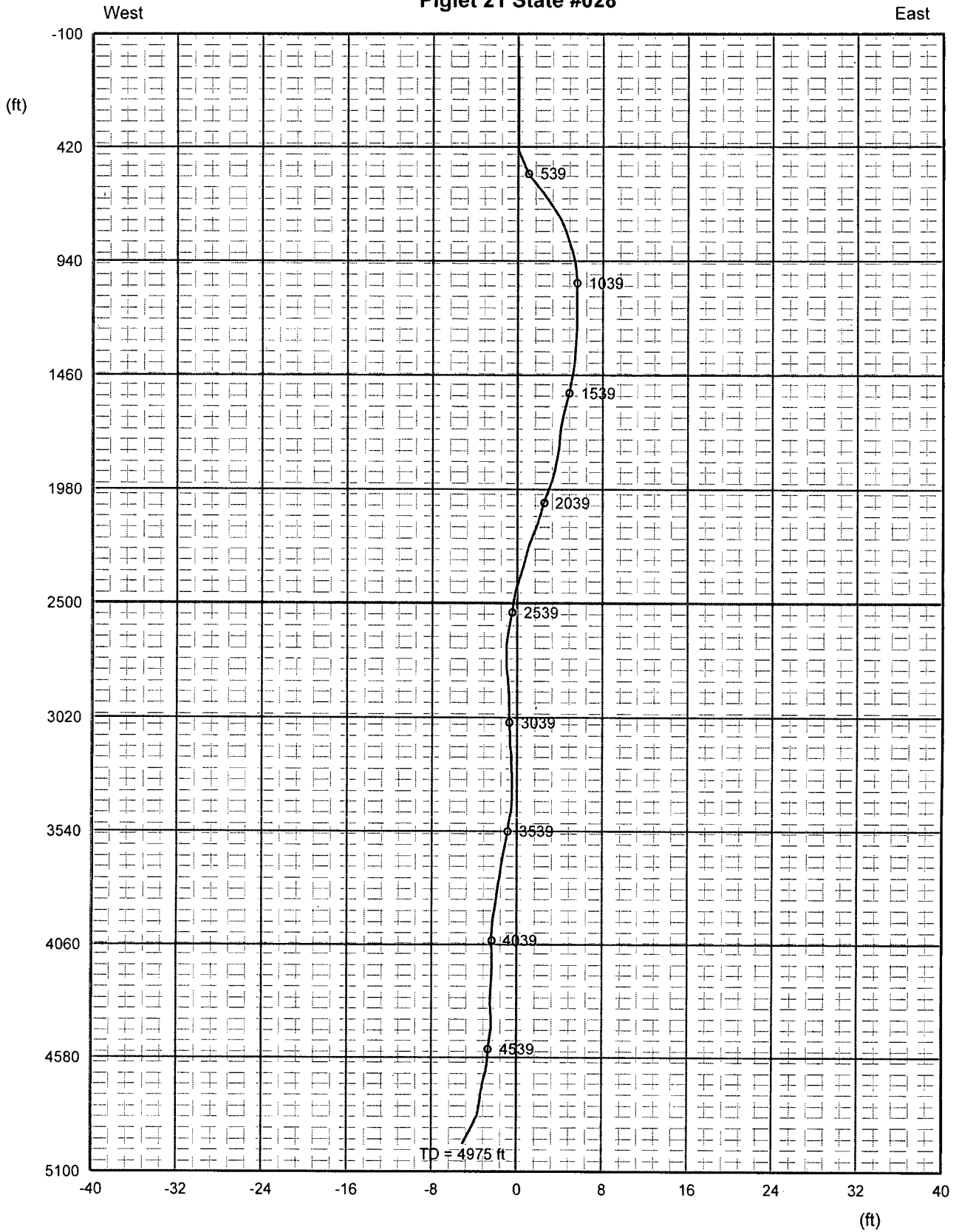
Piglet 21 State #028



Projection on Vertical Plane

Vertical scale 1 in : 650 , Horizontal scale 1 in : 13 ft

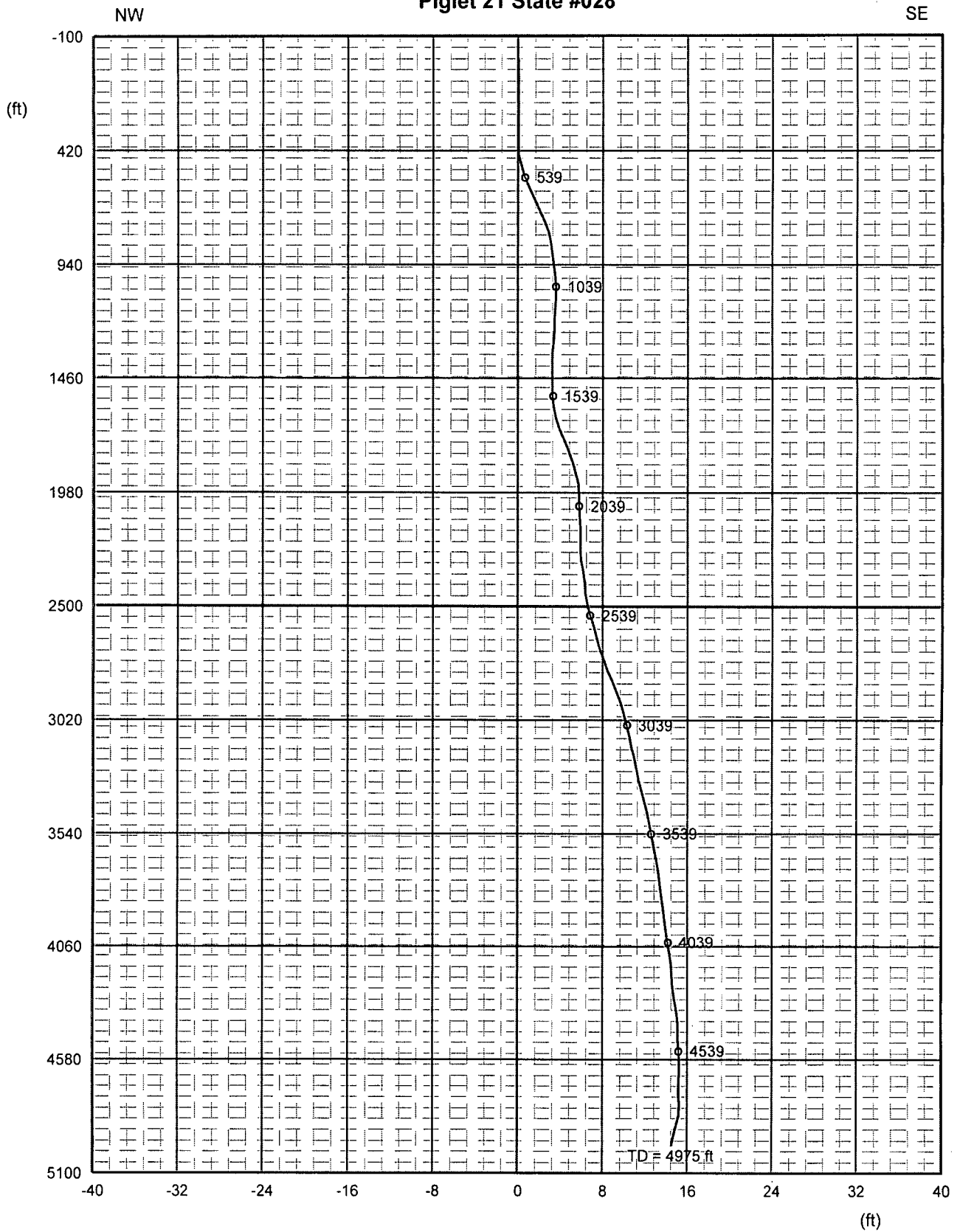
Piglet 21 State #028



Projection on Vertical Plane

Vertical scale 1 in : 650 , Horizontal scale 1 in : 13 ft

Piglet 21 State #028



Projection on Vertical Plane

Vertical scale 1 in : 650 , Horizontal scale 1 in : 13 ft

MLD (ft)	PLD (ft)	DELTA (deg)	DELTA (deg)	DLA (ft)	DLA (ft)
0.00	0.00	0.00	0.00	0.00	0.00
435.00	435.00	0.00	0.00	0.00	0.00
539.00	538.99	1.02	82.62	0.92	0.12
589.00	588.99	0.91	83.98	1.76	0.22
639.00	638.98	0.84	80.62	2.52	0.32
689.00	688.98	0.83	87.29	3.25	0.40
739.00	738.97	0.68	96.50	3.90	0.38
789.00	788.97	0.43	89.89	4.39	0.35
839.00	838.97	0.43	65.71	4.75	0.42
889.00	888.97	0.39	70.86	5.08	0.56
939.00	938.97	0.23	98.36	5.34	0.60
989.00	988.97	0.11	122.49	5.48	0.56
1039.00	1038.97	0.05	36.55	5.53	0.55
1089.00	1088.97	0.02	0.01	5.54	0.58
1139.00	1138.97	0.05	319.34	5.53	0.61
1189.00	1188.97	0.08	359.44	5.51	0.66
1239.00	1238.97	0.07	356.60	5.51	0.73
1289.00	1288.97	0.11	318.59	5.48	0.79
1339.00	1338.97	0.08	299.64	5.42	0.85
1389.00	1388.97	0.13	238.46	5.33	0.83
1439.00	1438.97	0.27	222.22	5.20	0.72
1489.00	1488.96	0.36	223.96	5.02	0.52
1539.00	1538.96	0.50	215.33	4.78	0.23
1589.00	1588.96	0.59	207.65	4.54	-0.18
1639.00	1638.96	0.79	200.71	4.29	-0.73
1689.00	1688.95	0.84	191.81	4.10	-1.41
1739.00	1738.95	0.86	189.00	3.97	-2.13
1789.00	1788.94	0.85	190.44	3.84	-2.86
1839.00	1838.94	0.79	195.54	3.68	-3.56
1889.00	1888.93	0.70	200.42	3.48	-4.18
1939.00	1938.93	0.77	208.46	3.21	-4.76
1989.00	1988.92	0.72	225.03	2.83	-5.28
2039.00	2038.92	0.58	224.48	2.43	-5.68
2089.00	2088.92	0.59	214.85	2.11	-6.07
2139.00	2138.91	0.71	217.60	1.77	-6.53
2189.00	2188.91	0.66	228.37	1.37	-6.97
2239.00	2238.91	0.51	224.22	1.00	-7.32
2289.00	2288.91	0.53	208.56	0.73	-7.68
2339.00	2338.90	0.70	208.29	0.48	-8.15
2389.00	2388.90	0.73	215.30	0.15	-8.68
2439.00	2438.90	0.59	212.46	-0.17	-9.15
2489.00	2488.89	0.60	197.81	-0.39	-9.62
2539.00	2538.89	0.71	194.89	-0.55	-10.17

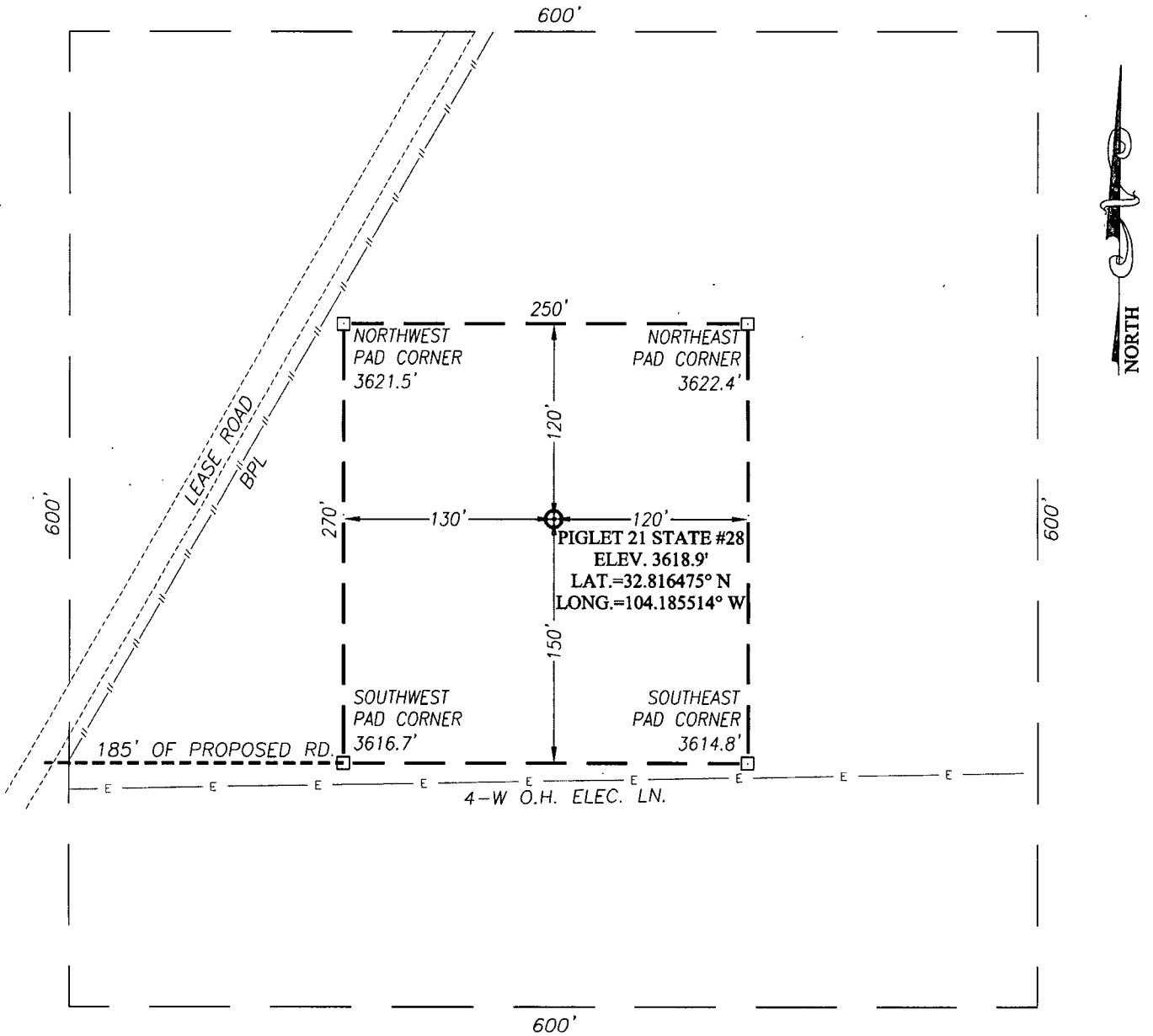
2689.00	2688.88	0.59	187.58	-1.06	-11.95
2739.00	2738.88	0.58	177.10	-1.09	-12.46
2789.00	2788.87	0.55	171.03	-1.04	-12.94
2839.00	2838.87	0.61	166.85	-0.94	-13.44
2889.00	2888.87	0.63	172.93	-0.84	-13.97
2939.00	2938.86	0.54	180.80	-0.81	-14.48
2989.00	2988.86	0.45	180.26	-0.82	-14.91
3039.00	3038.86	0.36	174.40	-0.80	-15.26
3089.00	3088.86	0.33	170.22	-0.76	-15.56
3139.00	3138.86	0.31	164.37	-0.70	-15.83
3189.00	3188.86	0.29	162.67	-0.63	-16.08
3239.00	3238.86	0.27	169.08	-0.57	-16.32
3289.00	3288.86	0.34	173.78	-0.53	-16.58
3339.00	3338.86	0.42	180.49	-0.52	-16.91
3389.00	3388.86	0.47	186.71	-0.54	-17.30
3439.00	3438.85	0.56	194.00	-0.62	-17.74
3489.00	3488.85	0.59	199.81	-0.77	-18.21
3539.00	3538.85	0.59	203.32	-0.96	-18.69
3589.00	3588.85	0.57	201.26	-1.15	-19.16
3639.00	3638.84	0.55	202.62	-1.33	-19.61
3689.00	3688.84	0.51	202.80	-1.51	-20.04
3739.00	3738.84	0.49	203.51	-1.68	-20.44
3789.00	3788.84	0.44	204.56	-1.85	-20.81
3839.00	3838.84	0.42	205.64	-2.00	-21.15
3889.00	3888.84	0.40	206.60	-2.16	-21.46
3939.00	3938.83	0.39	202.34	-2.30	-21.77
3989.00	3988.83	0.37	195.76	-2.41	-22.09
4039.00	4038.83	0.30	173.55	-2.44	-22.37
4089.00	4088.83	0.22	165.55	-2.40	-22.59
4139.00	4138.83	0.13	186.90	-2.38	-22.74
4189.00	4188.83	0.15	199.70	-2.41	-22.86
4239.00	4238.83	0.23	204.82	-2.48	-23.01
4289.00	4288.83	0.34	187.62	-2.54	-23.25
4339.00	4338.83	0.31	169.05	-2.53	-23.53
4389.00	4388.83	0.16	143.76	-2.47	-23.71
4439.00	4438.83	0.13	235.01	-2.47	-23.80
4489.00	4488.83	0.26	223.46	-2.60	-23.92
4539.00	4538.83	0.36	202.44	-2.74	-24.14
4589.00	4588.83	0.19	197.82	-2.83	-24.37
4639.00	4638.83	0.25	252.28	-2.95	-24.48
4689.00	4688.83	0.42	234.35	-3.21	-24.62
4739.00	4738.83	0.33	207.93	-3.43	-24.86
4789.00	4788.82	0.19	220.80	-3.55	-25.04
4839.00	4838.82	0.33	251.05	-3.73	-25.15

4939.00	4938.82	0.68	244.30	-4.16	-25.38
4975.00	4974.82	0.68	244.30	-5.14	-25.57
MD (ft)	TVD (ft)	DEVI (deg)	AZIM (deg)	DX (ft)	DY (ft)

COMPANY: Oxy USA, Inc.
 WELL: Piglet 21 State #028
 FIELD: Artesia; Glorieta-Yeso
 STATE: New Mexico
 COUNTRY: USA
 Date Logged: 11-Oct-2013 Date Processed: 23-Oct-2013
 Well Location: 1511' FSL & 988' FWL

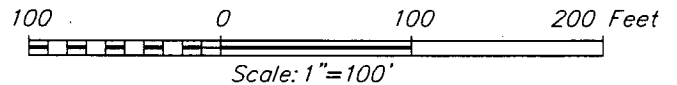
Elevations: K.B. 3633 ft D.F. 3632 ft G.L. 3619 ft
 API Number: 30-015-41175 Job Number: DSP-2013-12187

SECTION 21, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY **NEW MEXICO**



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. 82 AND CO. RD. #208, GO WEST ON U.S. HWY. #82 APPROX. 0.9 MILES. TURN RIGHT AND GO NORTH APPROX. 1.1 MILE. VEER RIGHT AND GO NORTHEAST APPROX. 0.4 MILES. THIS LOCATION IS EAST APPROX. 220 FEET.



OXY U.S.A. WTP LP

PIGLET 21 STATE #28 WELL
LOCATED 1511 FEET FROM THE SOUTH LINE
AND 988 FEET FROM THE WEST LINE OF SECTION 21,
TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (575) 393-3117 www.jwsc.biz

Survey Date: 1/25/13	CAD Date: 2/11/13	Drawn By: ACR
W.O. No.: 13110135	Rev. :	Rel. W.O.: . . .
		Sheet 1 of 1