

Results of Directional Survey

API number:	30-025-40371		
OGRID:		Operator:	EOG RESOURCES INC
		Property:	BROWN BEAR 36 STATE # 1H

surface	ULSTR:	M	36	T	25S	R	33E
				220	FSL	645	FWL

BH Loc	ULSTR:	D	36	T	25S	R	33E
14305	MD	9418.7	TVD	231	FNL	350	FWL
				5049	FSL		

Top Perf/OH	ULSTR:	M	36	T	25S	R	33E
9665	MD	9494.7	TVD	414	FSL	372	FWL

Bot Perf/OH	ULSTR:	D	36	T	25S	R	33E
14181	MD	9425.7	TVD	355	FNL	352	FWL
				4925	FSL		

	MD	N/S	E/W	VD
	9633	163.99	-272.09	9484.28
TOP PERFS/OH	9665	194.21	-273.11	9494.71
	9665	194.21	-273.11	9494.71
	14090	4614.24	-292.30	9432.66
BOT PERFS/OH	14181	4704.96	-293.37	9425.69
	14185	4708.95	-293.42	9425.38

NEXT TO LAST	14256	4779.81	-294.26	9420.97
LAST READING	14305	4828.75	-295.03	9418.68
TD	14305	4828.75	-295.03	9418.68

Surface Location	220	FS	645	FW
Projected BHL	5049	FS	350	FW
Location of				
Top Perfs/OH	414	FS	372	FW
Bottom Perfs/OH	4925	FS	352	FW

SUMMARY of Subsurface Locations

Surface Location	M-36-25S-33E	220	FS	645	FW	Vert. Depth
Top Perfs/OH	M-36-25S-33E	414	FS	372	FW	9494.71
Bottom Perfs/OH	D-36-25S-33E	4925	FS	352	FW	9425.69
Projected TD	D-36-25S-33E	5049	FS	350	FW	9418.68

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EOG Brown Bear 36 State 1H Surveys from 0ft to 14305ft MD Survey
Geodetic Report
(Non-Def Survey)



HOBBS OCD

OCT 11 2013

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Report Date: July 18, 2013 - 09:22 AM
Client: Eog Resources
Field: NM Lea County (NAD 27)
Structure / Siot: EOG Brown Bear 36 State 1H / EOG Brown Bear 36 State 1H
Well: EOG Brown Bear 36 State 1H
Borehole: Original Borehole
UWI / API#: Cactus 123 / Unknown
Survey Name: EOG Brown Bear 36 State 1H Surveys from 0ft to 14305ft MD
Survey Date: July 10, 2013
Tort / AHD / DDI / ERD Ratio: 175.047 * / 5351.131 ft / 6.148 / 0.562
Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 4' 48.78384", W 103° 31' 55.35246"
Location Grid N/E Y/X: N 393829.000 RUS, E 748183.000 RUS
CRS Grid Convergence Angle: 0.4256 *
Grid Scale Factor: 0.99997964
Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 356.433 * (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3349.500 ft above
Seabed / Ground Elevation: 3319.000 ft above
Magnetic Declination: 7.408 *
Total Gravity Field Strength: 998.4826mgn (9.80665 Based)
Total Magnetic Field Strength: 48296.582 nT
Magnetic Dip Angle: 59.962 *
Declination Date: July 10, 2013
Magnetic Declination Model: BGM2012
North Reference: Grid North
Grid Convergence Used: 0.4256 *
Total Corr Mag North->Grid North: 6.9825 *
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (*/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
SHL	0.00	0.00	0.00	0.00	-3349.50	0.00	0.00	0.00	N/A	393829.00	748183.00	N 32 4 48.78	W 103 31 55.35
	100.00	0.75	207.08	100.00	-3249.50	-0.56	-0.58	-0.30	0.75	393828.42	748182.70	N 32 4 48.78	W 103 31 55.36
	200.00	1.03	220.12	199.99	-3149.51	-1.78	-1.85	-1.18	0.34	393827.15	748181.82	N 32 4 48.77	W 103 31 55.37
	300.00	0.98	228.72	299.97	-3049.53	-2.97	-3.13	-2.38	0.13	393825.87	748180.62	N 32 4 48.75	W 103 31 55.38
	400.00	0.76	221.57	399.96	-2949.54	-3.99	-4.21	-3.44	0.23	393824.79	748179.56	N 32 4 48.74	W 103 31 55.39
	500.00	0.68	226.77	499.95	-2849.55	-4.83	-5.11	-4.31	0.10	393823.89	748178.69	N 32 4 48.73	W 103 31 55.40
	600.00	0.52	236.83	599.94	-2749.56	-5.44	-5.77	-5.12	0.19	393823.23	748177.88	N 32 4 48.73	W 103 31 55.41
	700.00	0.30	243.63	699.94	-2649.56	-5.76	-6.13	-5.74	0.22	393822.87	748177.26	N 32 4 48.72	W 103 31 55.42
	800.00	0.19	88.84	799.94	-2549.56	-5.87	-6.24	-5.81	0.48	393822.76	748177.19	N 32 4 48.72	W 103 31 55.42
	900.00	0.39	103.24	899.94	-2449.56	-5.98	-6.32	-5.31	0.21	393822.68	748177.69	N 32 4 48.72	W 103 31 55.41
	1000.00	0.40	118.22	999.94	-2349.56	-6.26	-6.56	-4.67	0.10	393822.44	748178.33	N 32 4 48.72	W 103 31 55.41
	1050.00	0.28	127.90	1049.94	-2299.56	-6.43	-6.72	-4.42	0.27	393822.28	748178.58	N 32 4 48.72	W 103 31 55.40
	1148.00	0.44	187.14	1147.94	-2201.56	-6.96	-7.24	-4.28	0.39	393821.76	748178.72	N 32 4 48.71	W 103 31 55.40
	1330.00	0.35	162.97	1329.93	-2019.57	-8.19	-8.46	-4.20	0.10	393820.54	748178.80	N 32 4 48.70	W 103 31 55.40
	1520.00	0.35	263.78	1519.93	-1829.57	-8.78	-9.06	-4.61	0.28	393819.92	748178.39	N 32 4 48.69	W 103 31 55.41
	1710.00	0.53	279.78	1709.92	-1639.58	-8.80	-9.00	-6.05	0.11	393820.00	748176.95	N 32 4 48.70	W 103 31 55.42
	1900.00	0.70	277.06	1899.91	-1449.59	-8.18	-8.70	-8.07	0.09	393820.30	748174.93	N 32 4 48.70	W 103 31 55.45
	2090.00	0.70	281.19	2089.90	-1259.60	-7.67	-8.34	-10.36	0.03	393820.66	748172.64	N 32 4 48.70	W 103 31 55.47
	2280.00	0.26	296.83	2279.89	-1069.61	-7.16	-7.92	-11.88	0.24	393821.08	748171.12	N 32 4 48.71	W 103 31 55.49
	2470.00	0.44	6.44	2469.89	-879.61	-6.22	-7.00	-12.19	0.22	393822.00	748170.81	N 32 4 48.72	W 103 31 55.49
	2660.00	0.70	41.77	2659.88	-689.62	-4.69	-5.41	-11.33	0.22	393823.59	748171.67	N 32 4 48.73	W 103 31 55.48
	2850.00	0.70	18.39	2849.87	-499.63	-2.80	-3.44	-10.19	0.15	393825.56	748172.81	N 32 4 48.75	W 103 31 55.47
	3040.00	0.44	322.41	3039.86	-309.64	-1.12	-1.76	-10.27	0.31	393827.24	748172.73	N 32 4 48.77	W 103 31 55.47
	3230.00	0.70	53.02	3229.85	-119.65	0.13	-0.48	-9.79	0.44	393828.52	748173.21	N 32 4 48.78	W 103 31 55.47
	3420.00	0.09	95.47	3419.85	70.35	0.74	0.20	-8.71	0.33	393829.20	748174.29	N 32 4 48.79	W 103 31 55.45
	3610.00	0.62	295.69	3609.84	260.34	1.22	0.63	-9.49	0.37	393829.63	748173.51	N 32 4 48.79	W 103 31 55.46
	3799.00	0.70	330.76	3798.83	449.33	2.76	2.08	-10.98	0.21	393831.08	748172.02	N 32 4 48.81	W 103 31 55.48
	3989.00	1.06	31.23	3988.81	639.31	5.25	4.60	-10.63	0.49	393833.60	748172.37	N 32 4 48.83	W 103 31 55.48
	4180.00	0.88	267.48	4179.80	830.30	6.73	6.04	-11.18	0.90	393835.04	748171.82	N 32 4 48.84	W 103 31 55.48
	4369.00	0.44	206.48	4368.79	1019.29	8.13	5.33	-12.96	0.41	393834.33	748170.04	N 32 4 48.84	W 103 31 55.50
	4559.00	1.58	124.04	4558.76	1209.26	3.90	3.21	-11.11	0.83	393832.21	748171.89	N 32 4 48.82	W 103 31 55.48
	4748.00	0.88	108.92	4747.72	1398.22	1.75	1.28	-7.58	0.41	393830.28	748175.42	N 32 4 48.80	W 103 31 55.44
	4938.00	1.23	141.79	4937.68	1588.18	-0.48	-0.79	-4.94	0.36	393828.21	748178.06	N 32 4 48.78	W 103 31 55.41
	5022.00	0.26	18.57	5021.68	1672.18	-1.05	-1.32	-4.32	1.65	393827.68	748178.68	N 32 4 48.77	W 103 31 55.40
	5207.00	0.70	342.45	5206.67	1857.17	0.44	0.15	-4.53	0.28	393829.15	748178.47	N 32 4 48.79	W 103 31 55.41
	5396.00	3.34	237.50	5395.57	2046.07	-1.11	-1.70	-9.52	1.90	393827.30	748173.48	N 32 4 48.77	W 103 31 55.46
	5586.00	4.66	238.56	5585.10	2235.60	-7.39	-8.70	-20.77	0.70	393820.30	748162.23	N 32 4 48.70	W 103 31 55.59
	5774.00	5.19	240.14	5772.40	2422.90	-14.73	-16.92	-34.66	0.29	393812.08	748148.34	N 32 4 48.62	W 103 31 55.76
	5964.00	5.01	231.75	5961.66	2612.16	-23.26	-26.34	-48.63	0.40	393802.67	748134.37	N 32 4 48.53	W 103 31 55.92
	6154.00	4.57	232.03	6150.99	2801.49	-32.26	-36.13	-61.11	0.23	393792.87	748121.89	N 32 4 48.43	W 103 31 56.07
	6343.00	4.31	234.03	6339.42	2989.92	-40.32	-44.93	-72.80	0.16	393784.07	748110.21	N 32 4 48.34	W 103 31 56.20
	6531.00	4.31	235.19	6526.89	3177.39	-47.77	-53.11	-84.31	0.05	393775.89	748098.69	N 32 4 48.26	W 103 31 56.34
	6721.00	4.84	239.91	6716.29	3366.79	-55.05	-61.21	-97.11	0.34	393767.79	748085.89	N 32 4 48.19	W 103 31 56.49
	6910.00	5.19	238.25	6904.56	3555.06	-62.65	-69.70	-111.28	0.20	393759.30	748071.72	N 32 4 48.10	W 103 31 56.65
	7101.00	5.10	238.37	7094.79	3745.29	-70.72	-78.70	-125.85	0.05	393750.30	748057.15	N 32 4 48.01	W 103 31 56.82
	7290.00	5.28	239.15	7283.02	3933.52	-78.66	-87.57	-140.47	0.10	393741.43	748042.53	N 32 4 47.93	W 103 31 56.99
	7480.00	5.10	240.40	7472.24	4122.74	-86.37	-96.22	-155.32	0.11	393732.78	748027.68	N 32 4 47.84	W 103 31 57.17
	7671.00	4.84	238.85	7662.52	4313.02	-93.83	-104.58	-189.60	0.15	393724.42	748013.41	N 32 4 47.76	W 103 31 57.33
	7860.00	5.36	238.86	7850.77	4501.27	-101.88	-113.53	-183.81	0.29	393715.47	747999.19	N 32 4 47.67	W 103 31 57.50
	8051.00	4.75	238.16	8041.03	4691.53	-110.03	-122.58	-198.00	0.32	393706.42	747985.00	N 32 4 47.59	W 103 31 57.66
	8241.00	5.28	235.64	8230.30	4880.80	-118.23	-131.67	-211.90	0.30	393697.34	747971.10	N 32 4 47.50	W 103 31 57.83
	8430.00	5.28	235.66	8418.50	5069.00	-127.13	-141.48	-226.26	0.00	393687.52	747956.74	N 32 4 47.40	W 103 31 57.99
	8620.00	4.92	234.72	8607.75	5258.25	-135.88	-151.12	-240.13	0.19	393677.89	747942.88	N 32 4 47.31	W 103 31 58.16
	8810.00	3.17	235.79	8797.27	5447.77	-142.85	-158.78	-251.13	0.92	393670.23	747931.88	N 32 4 47.23	W 103 31 58.28
	8978.00	2.20	232.66	8965.08	5615.58	-147.01	-163.35	-257.53	0.58	393665.66	747925.47	N 32 4 47.19	W 103 31 58.36
	9001.00	2.02	234.92	8988.06	5638.56	-147.46	-163.85	-258.21	0.86	393665.16	747924.79	N 32 4 47.18	W 103 31 58.37
	9029.00	1.49	271.00	9016.05	5666.55	-147.69	-164.12	-258.98	4.28	393664.88	747924.02	N 32 4 47.18	W 103 31 58.38
	9061.00	3.61	340.70	9048.02	5688.52	-146.69	-163.16	-259.73	10.61	393665.84	747923.27	N 32 4 47.19	W 103 31 58.39
	9093.00	7.56	353.46	9079.87	5730.37	-143.62	-160.12	-260.30	12.86	393666.88	747922.70	N 32 4 47.22	W 103 31 58.39
	9124.00	11.96	357.38	9110.41	5760.91	-138.37	-154.88	-260.68	14.35	393674.12	747922.32	N 32 4 47.27	W 103 31 58.40
	9156.00	17.06	359.16	9141.38	5791.88	-130.36	-146.87	-260.90	16.00	393682.13	747922.10	N 32 4 47.35	W 103 31 58.40
	9188.00	20.93	359.92	9171.63	5822.13	-119.96	-136.46	-260.98	12.12	393692.54	747922.02	N 32 4 47.45	W 103 31 58.40
	9219.00	23.83	0.26	9200.29	5850.79	-108.18	-124.66	-260.96	9.36	393704.34	747922.05	N 32 4 47.57	W 103 31 58.40
	9251.00	27.00	359.62	9229.19	5879.69	-94.48	-110.93	-260.95	9.92	393716.08	747922.05	N 32 4 47.71	W 103 31 58.39
	9283.00	31.74	358.83	9257.07	5907.57	-78.81	-95.24	-261.15	14.89	393733.76	747921.86	N 32 4 47.86	W 103 31 58.40
	9315.00	35.61	358.63	9283.70	5934.20	-61.08	-77.50	-261.54	12.10	393751.50	747921.46	N 32 4 48.04	W 103 31 58.40
	9347.00	38.51	358.53	9309.23	5959.73	-41.81	-58.23	-262.02	9.06	393770.78	747920.98	N 32 4 48.23	W 103 31 58.40

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ° ' '')	Longitude (E/W ° ° ' '')
	9379.00	41.50	358.39	9333.74	5984.24	-21.25	-37.66	-262.58	9.35	393971.34	747920.43	N 32 4 48.43	W 103 31 58.41
	9411.00	43.97	357.74	9357.24	6007.74	0.45	-15.96	-263.31	7.84	393813.04	747919.89	N 32 4 48.65	W 103 31 58.41
	9443.00	46.78	357.04	9379.72	6030.22	23.22	6.79	-264.35	8.92	393835.79	747918.65	N 32 4 48.87	W 103 31 58.42
	9475.00	49.68	357.08	9401.03	6051.53	47.08	30.62	-265.58	9.06	393859.62	747917.43	N 32 4 49.11	W 103 31 58.44
	9507.00	52.76	356.85	9421.07	6071.57	72.02	55.53	-266.90	9.64	393884.52	747916.11	N 32 4 49.35	W 103 31 58.45
	9538.00	56.10	356.86	9439.10	6089.60	97.23	80.70	-268.28	10.77	393909.70	747914.73	N 32 4 49.60	W 103 31 58.46
	9570.00	59.53	357.15	9456.15	6106.65	124.31	107.74	-269.69	10.75	393936.74	747913.31	N 32 4 49.87	W 103 31 58.48
	9602.00	63.05	357.63	9471.52	6122.02	152.37	135.77	-270.97	11.08	393964.77	747912.04	N 32 4 50.15	W 103 31 58.49
	9633.00	68.32	357.80	9484.28	6134.78	180.60	163.99	-272.09	17.01	393992.99	747910.91	N 32 4 50.43	W 103 31 58.50
	9665.00	73.60	358.35	9494.71	6145.21	210.83	194.21	-273.11	16.58	394023.21	747909.90	N 32 4 50.73	W 103 31 58.51
	9697.00	77.65	358.86	9502.65	6153.15	241.80	225.20	-273.86	12.75	394054.19	747909.14	N 32 4 51.03	W 103 31 58.52
	9729.00	80.90	359.74	9508.61	6159.11	273.19	256.63	-274.24	10.51	394085.62	747908.76	N 32 4 51.34	W 103 31 58.52
	9761.00	83.01	359.40	9513.09	6163.59	304.83	288.31	-274.48	6.68	394117.31	747908.52	N 32 4 51.66	W 103 31 58.52
	9792.00	83.89	358.62	9516.62	6167.12	335.60	319.10	-275.01	3.78	394148.10	747907.99	N 32 4 51.96	W 103 31 58.52
	9824.00	84.86	358.07	9519.76	6170.26	367.42	350.94	-275.93	3.48	394179.93	747907.07	N 32 4 52.28	W 103 31 58.53
	9855.00	87.32	356.28	9521.87	6172.37	398.35	381.82	-277.46	9.81	394210.81	747905.55	N 32 4 52.58	W 103 31 58.54
	9887.00	90.04	354.60	9522.61	6173.11	430.33	413.71	-280.00	9.99	394242.70	747903.00	N 32 4 52.90	W 103 31 58.57
	9918.00	90.75	354.17	9522.40	6172.90	461.31	444.56	-283.04	2.68	394273.55	747899.97	N 32 4 53.20	W 103 31 58.60
	10012.00	91.89	357.36	9520.23	6170.73	555.26	538.26	-289.98	3.60	394367.25	747893.03	N 32 4 54.13	W 103 31 58.68
	10107.00	91.10	359.47	9517.75	6168.25	650.17	633.19	-292.60	2.37	394462.18	747890.41	N 32 4 55.07	W 103 31 58.70
	10202.00	91.98	0.15	9515.20	6165.70	744.97	728.15	-292.92	1.17	394557.14	747890.09	N 32 4 56.01	W 103 31 58.69
	10296.00	92.68	359.54	9511.38	6161.88	838.72	822.07	-293.17	0.99	394651.06	747889.84	N 32 4 56.94	W 103 31 58.69
	10390.00	91.63	0.95	9507.84	6158.34	932.44	916.00	-292.77	1.87	394744.98	747890.24	N 32 4 57.87	W 103 31 58.68
	10485.00	90.40	2.06	9506.16	6156.68	1027.05	1010.95	-290.27	1.74	394839.93	747892.73	N 32 4 58.81	W 103 31 58.64
	10580.00	90.40	1.86	9505.50	6156.00	1121.61	1105.89	-287.02	0.21	394934.87	747895.98	N 32 4 59.75	W 103 31 58.59
	10675.00	91.10	1.78	9504.25	6154.75	1216.18	1200.84	-284.01	0.74	395029.81	747899.00	N 32 5 0.69	W 103 31 58.55
	10769.00	91.28	1.74	9502.30	6152.80	1309.75	1294.77	-281.12	0.20	395123.74	747901.89	N 32 5 1.62	W 103 31 58.51
	10864.00	92.24	1.96	9499.38	6149.88	1404.28	1389.68	-278.06	1.04	395218.65	747904.95	N 32 5 2.66	W 103 31 58.46
	10959.00	90.48	1.42	9497.13	6147.63	1498.85	1484.61	-275.26	1.94	395313.57	747907.75	N 32 5 3.49	W 103 31 58.42
	11054.00	90.22	0.71	9496.55	6147.05	1593.54	1579.59	-273.49	0.80	395408.55	747909.52	N 32 5 4.43	W 103 31 58.39
	11149.00	90.04	359.89	9496.33	6146.83	1688.32	1674.58	-272.99	0.88	395503.55	747910.01	N 32 5 5.37	W 103 31 58.38
	11243.00	91.80	358.86	9494.82	6145.32	1782.18	1768.56	-274.02	2.17	395597.52	747908.99	N 32 5 6.30	W 103 31 58.38
	11338.00	92.07	358.89	9491.62	6142.12	1877.04	1863.49	-275.88	0.29	395692.45	747907.12	N 32 5 7.24	W 103 31 58.40
	11433.00	91.36	358.93	9488.77	6139.27	1971.91	1958.43	-277.69	0.75	395787.38	747905.32	N 32 5 8.18	W 103 31 58.41
	11528.00	91.80	359.19	9486.15	6136.65	2066.77	2053.38	-279.25	0.54	395882.33	747903.76	N 32 5 9.12	W 103 31 58.42
	11623.00	92.68	359.23	9482.44	6132.94	2161.59	2148.30	-280.55	0.93	395977.25	747902.45	N 32 5 10.06	W 103 31 58.43
	11718.00	92.07	359.84	9478.50	6129.00	2256.37	2243.21	-281.32	0.91	396072.16	747901.68	N 32 5 11.00	W 103 31 58.43
	11812.00	91.01	0.76	9475.98	6126.48	2350.12	2337.17	-280.83	1.49	396166.12	747902.17	N 32 5 11.93	W 103 31 58.41
	11908.00	91.10	0.51	9474.21	6124.71	2445.84	2433.15	-279.77	0.28	396262.10	747903.24	N 32 5 12.88	W 103 31 58.39
	12003.00	91.36	359.93	9472.17	6122.67	2540.61	2528.13	-279.40	0.67	396357.07	747903.60	N 32 5 13.82	W 103 31 58.38
	12098.00	91.28	359.27	9469.98	6120.48	2635.44	2623.10	-280.07	0.70	396452.04	747902.94	N 32 5 14.76	W 103 31 58.38
	12193.00	91.89	359.52	9467.35	6117.85	2730.28	2718.06	-281.07	0.69	396547.00	747901.94	N 32 5 15.70	W 103 31 58.38
	12288.00	93.12	359.42	9463.20	6113.70	2825.05	2812.96	-281.95	1.30	396641.90	747901.06	N 32 5 16.64	W 103 31 58.39
	12383.00	91.89	359.12	9459.05	6109.55	2919.84	2907.86	-283.16	1.33	396736.80	747899.85	N 32 5 17.58	W 103 31 58.39
	12478.00	90.92	359.28	9456.72	6107.22	3014.70	3002.82	-284.48	1.03	396831.75	747898.52	N 32 5 18.52	W 103 31 58.40
	12573.00	90.13	0.34	9455.85	6106.35	3109.53	3097.82	-284.80	1.39	396926.75	747898.21	N 32 5 19.46	W 103 31 58.40
	12668.00	90.40	0.59	9455.41	6105.91	3204.30	3192.81	-284.03	0.39	397021.74	747898.98	N 32 5 20.40	W 103 31 58.38
	12764.00	90.66	359.54	9454.52	6105.02	3300.10	3288.81	-283.92	1.13	397117.73	747899.09	N 32 5 21.35	W 103 31 58.37
	12858.00	91.01	359.50	9453.15	6103.65	3393.95	3382.79	-284.71	0.37	397211.72	747898.30	N 32 5 22.28	W 103 31 58.37
	12952.00	90.84	359.86	9451.64	6102.14	3487.79	3476.78	-285.23	0.42	397305.70	747897.78	N 32 5 23.21	W 103 31 58.37
	13047.00	89.43	0.87	9451.41	6101.91	3582.56	3571.77	-284.62	1.83	397400.69	747898.38	N 32 5 24.15	W 103 31 58.35
	13141.00	89.87	0.24	9451.99	6102.49	3676.32	3665.77	-283.71	0.82	397494.68	747899.29	N 32 5 25.08	W 103 31 58.33
	13236.00	90.40	1.01	9451.76	6102.26	3771.06	3760.76	-282.68	0.98	397589.67	747900.33	N 32 5 26.02	W 103 31 58.31
	13332.00	90.84	0.08	9450.72	6101.22	3866.81	3856.75	-281.77	1.07	397685.66	747901.24	N 32 5 26.97	W 103 31 58.29
	13426.00	91.19	0.99	9449.06	6099.56	3960.55	3950.73	-280.89	1.04	397779.64	747902.12	N 32 5 27.90	W 103 31 58.28
	13521.00	90.57	359.46	9447.60	6098.10	4055.33	4045.71	-280.51	1.74	397874.62	747902.49	N 32 5 28.84	W 103 31 58.26
	13616.00	90.75	0.35	9446.50	6097.00	4150.14	4140.70	-280.67	0.96	397969.61	747902.33	N 32 5 29.78	W 103 31 58.26
	13711.00	90.66	358.15	9445.34	6095.84	4245.02	4235.68	-281.92	2.32	398064.59	747901.09	N 32 5 30.72	W 103 31 58.26
	13805.00	90.40	357.74	9444.47	6094.97	4338.98	4329.62	-285.29	0.52	398158.52	747897.72	N 32 5 31.65	W 103 31 58.29
	13900.00	92.07	358.63	9442.42	6092.92	4433.91	4424.54	-288.29	1.99	398253.45	747894.71	N 32 5 32.59	W 103 31 58.32
	13995.00	92.88	358.70	9438.48	6088.98	4528.76	4519.44	-290.51	0.65	398348.34	747892.50	N 32 5 33.53	W 103 31 58.34
	14090.00	94.35	359.13	9432.66	6083.16	4623.48	4614.24	-292.30	1.82	398443.13	747890.70	N 32 5 34.47	W 103 31 58.35
	14185.00	94.44	359.52	9425.38	6075.88	4718.08	4708.95	-293.42	0.42	398537.85	747889.59	N 32 5 35.40	W 103 31 58.36
Final Survey	14256.00	92.68	359.11	9420.97	6071.47	4788.85	4779.81	-294.26	2.54	398608.70	747888.74	N 32 5 36.10	W 103 31 58.36
Proj to TD	14305.00	92.68	359.11	9418.68	6069.18	4837.75	4828.75	-295.03	0.00	398657.64	747887.98	N 32 5 36.59	W 103 31 58.36

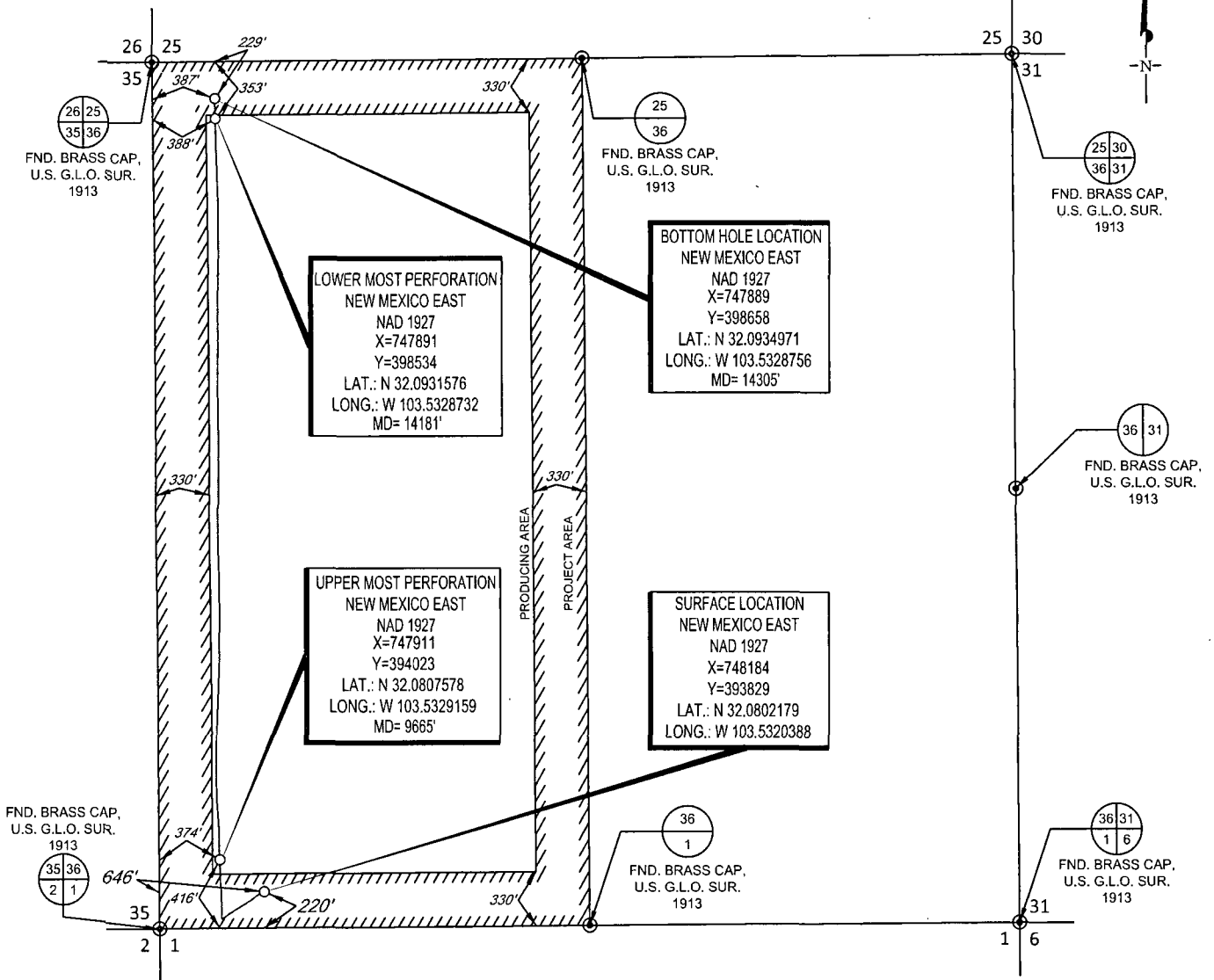
Survey Type: Non-Def Survey

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

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	30.500	Act Stns	30.000	30.000	SLB_NSG+MSHOT-Depth Only	Original Borehole / EOG Brown Bear 36 State 1H Surveys from 0ft to 14305ft MD
	30.500	1050.000	Act Stns	30.000	30.000	SLB_NSG+MSHOT	Original Borehole / EOG Brown Bear 36 State 1H Surveys from Original Borehole / EOG Brown Bear 36 State 1H Surveys from
	1050.000	14256.000	Act Stns	30.000	30.000	SLB_MWD-STD	Original Borehole / EOG Brown Bear 36 State 1H Surveys from
	14256.000	14305.000	Act Stns	30.000	30.000	SLB_BLIND+TREND	Original Borehole / EOG Brown Bear 36 State 1H Surveys from

SCALE: 1" = 1000'
0' 500' 1000'

SECTION 36, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO

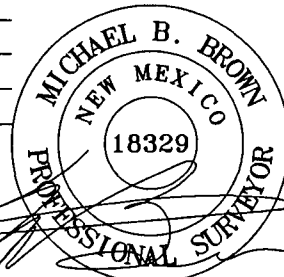


LEASE NAME & WELL NO.: BROWN BEAR 36 STATE #1H
SECTION 36 TWP 25-S RGE 33-E SURVEY N.M.P.M.
COUNTY LEA STATE NM ELEVATION 3319'
DESCRIPTION 220' FSL & 646' FWL



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Michael Blake Brown, P.S. No. 18329
SEPTEMBER 19, 2013

eoog resources, inc.

BROWN BEAR 36 STATE
#1H AS COMPLETED

REVISION:

INT DATE

DATE: SEPTEMBER 19, 2013

FILE:AD_BROWNBear36STATE_1H

DRAWN BY: C.S.G

SHEET: 1 OF 1

NOTES:

1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY EOG RESOURCES, INC. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
4. B.O.L./P.O.B. = BEGINNING OF LINE/POINT OF BEGINNING
5. E.O.L./P.O.E. = END OF LINE/POINT OF EXIT