

SUR: X-4-21s-35e, 660/S & 990/E
BHL: W-4-21s-35e, 711/S & 1888/E
API # 30-025-37129

CHESAPEAKE OPERATING, INC.
KF "4" State #1

slot #1
UNKNOWN
LEA COUNTY, NEW MEXICO

SURVEY LISTING

by
Baker Hughes INTEQ

Your ref : MWD
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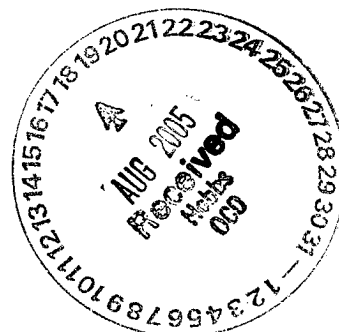
Date printed : 17-Aug-2005
Date created : 2-Jun-2005
Last revised : 30-Jun-2005

Field is centred on n32 30 0.000,w103 30 0
Structure is centred on n32 30 9.000,w103 22 0.12

Slot location is n32 30 9.000,w103 22 0.120
Slot Grid coordinates are N 547873.140, E 798011.514
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is Grid North

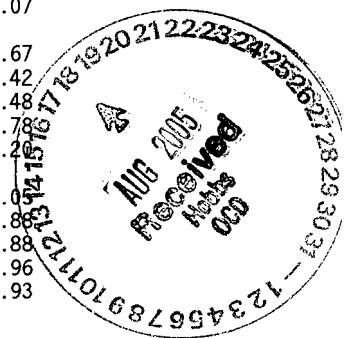


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UNKNOWN, LEA COUNTY, NEW MEXICO

SURVEY LISTING Page 1
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Last revised : 30-Jun-2005

Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	RECTANGULAR COORDINATES		Dogleg Deg/100ft	Vert Sect	GRID Easting	C O O R D S Northing
8000.00	3.13	63.60	7998.70	70.70N	49.80E	0.00	-47.66	798061.31	547943.84
8359.00	5.50	65.10	8356.66	82.30N	74.19E	0.66	-71.68	798085.70	547955.44
8423.00	5.00	66.30	8420.39	84.72N	79.52E	0.80	-76.94	798091.04	547957.86
8454.00	4.40	65.90	8451.28	85.74N	81.85E	1.94	-79.24	798093.36	547958.88
8486.00	4.20	63.40	8483.19	86.77N	84.01E	0.86	-81.37	798095.53	547959.91
8518.00	4.10	57.40	8515.11	87.91N	86.03E	1.39	-83.35	798097.54	547961.05
8550.00	4.20	47.80	8547.03	89.31N	87.86E	2.19	-85.14	798099.37	547962.46
8582.00	4.00	34.20	8578.95	91.02N	89.35E	3.09	-86.58	798100.87	547964.17
8613.00	4.20	31.60	8609.87	92.89N	90.56E	0.88	-87.73	798102.07	547966.03
8645.00	3.60	32.90	8641.79	94.73N	91.72E	1.90	-88.83	798103.23	547967.87
8677.00	2.90	26.20	8673.74	96.30N	92.62E	2.49	-89.69	798104.13	547969.44
8709.00	2.70	24.60	8705.70	97.71N	93.29E	0.67	-90.31	798104.80	547970.85
8773.00	1.70	36.80	8769.65	99.84N	94.49E	1.72	-91.45	798106.00	547972.98
8836.00	1.30	43.20	8832.63	101.11N	95.53E	0.69	-92.46	798107.05	547974.25
8868.00	0.80	70.80	8864.63	101.45N	95.99E	2.18	-92.91	798107.51	547974.59
8931.00	0.70	201.70	8927.63	101.23N	96.27E	2.17	-93.19	798107.78	547974.37
8963.00	1.30	212.70	8959.62	100.75N	96.00E	1.96	-92.93	798107.51	547973.89
8995.00	1.60	212.50	8991.61	100.06N	95.56E	0.94	-92.52	798107.08	547973.21
9059.00	1.50	197.00	9055.59	98.51N	94.84E	0.67	-91.84	798106.35	547971.65
9090.00	1.30	211.70	9086.58	97.82N	94.53E	1.32	-91.56	798106.05	547970.96
9120.00	1.40	199.00	9116.57	97.19N	94.24E	1.05	-91.28	798105.75	547970.33
9186.00	0.60	205.00	9182.56	96.11N	93.83E	1.22	-90.90	798105.34	547969.25
9261.00	0.60	70.00	9257.56	95.89N	94.03E	1.48	-91.11	798105.54	547969.03
9386.00	1.30	61.70	9382.54	96.79N	95.89E	0.57	-92.95	798107.41	547969.93
9511.00	1.60	66.90	9507.50	98.14N	98.75E	0.26	-95.76	798110.26	547971.28
9638.00	1.80	44.70	9634.44	100.26N	101.78E	0.54	-98.73	798113.30	547973.40
9901.00	1.10	61.40	9897.36	104.40N	106.90E	0.31	-103.72	798118.42	547977.54
10227.00	1.60	103.90	10223.28	104.81N	114.07E	0.33	-110.87	798125.58	547977.95
10287.00	1.20	137.20	10283.26	104.14N	115.31E	1.48	-112.13	798126.82	547977.28
10319.00	2.10	132.00	10315.25	103.50N	115.97E	2.85	-112.81	798127.49	547976.65
10348.00	2.70	154.90	10344.22	102.53N	116.66E	3.86	-113.53	798128.17	547975.67
10383.00	3.50	182.30	10379.17	100.72N	116.96E	4.75	-113.89	798128.48	547973.86
10414.00	5.80	211.60	10410.07	98.44N	116.10E	10.44	-113.10	798127.62	547971.58
10446.00	10.20	221.00	10441.75	94.92N	113.40E	14.30	-110.50	798124.91	547968.06
10478.00	15.20	223.30	10472.96	89.72N	108.66E	15.70	-105.92	798120.17	547962.86
10509.00	20.60	225.80	10502.45	82.96N	101.96E	17.59	-99.42	798113.47	547956.10
10541.00	25.20	229.30	10531.92	74.59N	92.75E	14.99	-90.47	798104.26	547947.73
10573.00	28.50	233.10	10560.47	65.56N	81.48E	11.62	-79.47	798092.99	547938.70
10604.00	31.50	238.90	10587.32	56.93N	68.62E	13.45	-66.88	798080.14	547930.07
10635.00	32.70	242.90	10613.58	48.93N	54.23E	7.87	-52.74	798065.75	547922.07
10667.00	34.60	247.60	10640.22	41.53N	38.13E	10.07	-36.87	798049.65	547914.67
10700.00	36.80	254.30	10667.03	35.28N	19.94E	13.59	-18.88	798031.46	547908.42
10731.00	39.00	261.60	10691.50	31.34N	1.34E	16.10	-0.40	798012.86	547904.48
10768.00	40.70	270.00	10719.93	29.64N	22.26W	15.25	23.14	797989.26	547902.78
10799.00	40.10	272.40	10743.54	30.06N	42.34W	5.38	43.22	797969.17	547903.26
10832.00	39.90	272.20	10768.82	30.91N	63.53W	0.72	64.43	797947.98	547904.00
10863.00	39.80	272.60	10792.62	31.74N	83.38W	0.89	84.30	797928.13	547904.86
10895.00	39.90	273.00	10817.18	32.74N	103.86W	0.86	104.80	797907.65	547905.88
10927.00	39.80	273.00	10841.75	33.82N	124.34W	0.31	125.30	797887.18	547906.96
10959.00	39.40	272.50	10866.41	34.79N	144.71W	1.60	145.69	797866.80	547907.93

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from structure and TVD from rotary table.
Bottom hole distance is 873.42 on azimuth 273.18 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 271.72 degrees.
Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ



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Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S		Dogleg Deg/100ft	Vert Sect	G R I D Easting	C O O R D S Northing
10991.00	39.60	271.60	10891.10	35.52N	165.05W	1.89	166.05	797846.46	547908.66
11023.00	39.80	271.20	10915.72	36.02N	185.49W	1.01	186.49	797826.03	547909.16
11055.00	40.00	271.40	10940.27	36.49N	206.01W	0.74	207.01	797805.51	547909.63
11087.00	39.50	271.20	10964.87	36.95N	226.47W	1.61	227.47	797785.05	547910.09
11121.00	38.80	271.10	10991.24	37.38N	247.93W	2.07	248.94	797763.59	547910.52
11154.00	38.00	270.90	11017.10	37.74N	268.42W	2.45	269.43	797743.09	547910.88
11186.00	37.50	271.10	11042.40	38.08N	288.01W	1.61	289.02	797723.50	547911.22
11218.00	36.40	270.30	11067.98	38.32N	307.24W	3.75	308.26	797704.27	547911.46
11252.00	34.90	270.70	11095.60	38.49N	327.06W	4.46	328.07	797684.46	547911.63
11283.00	34.30	271.20	11121.12	38.78N	344.66W	2.14	345.67	797666.86	547911.92
11315.00	32.90	271.00	11147.77	39.12N	362.36W	4.39	363.37	797649.15	547912.26
11346.00	32.20	271.40	11173.90	39.47N	379.04W	2.36	380.05	797632.48	547912.61
11378.00	31.00	271.10	11201.16	39.84N	395.80W	3.78	396.82	797615.71	547912.98
11410.00	29.80	270.50	11228.76	40.07N	411.99W	3.87	413.01	797599.52	547913.21
11442.00	29.50	269.00	11256.57	40.00N	427.82W	2.50	428.83	797583.69	547913.14
11506.00	29.00	269.50	11312.41	39.59N	459.09W	0.87	460.07	797552.42	547912.73
11570.00	29.90	268.90	11368.14	39.15N	490.55W	1.48	491.51	797520.96	547912.29
11635.00	30.00	266.00	11424.46	37.70N	522.96W	2.23	523.86	797488.55	547910.84
11699.00	29.60	265.80	11480.00	35.43N	554.69W	0.64	555.50	797456.83	547908.57
11763.00	31.40	266.60	11535.14	33.28N	587.10W	2.88	587.83	797424.42	547906.42
11833.00	32.30	267.60	11594.60	31.42N	623.99W	1.49	624.65	797387.53	547904.56
11865.00	32.60	268.00	11621.60	30.76N	641.15W	1.15	641.78	797370.37	547903.90
11898.00	34.20	269.70	11649.15	30.40N	659.31W	5.62	659.92	797352.21	547903.54
11930.00	35.80	270.00	11675.37	30.35N	677.66W	5.03	678.26	797333.86	547903.49
11962.00	35.10	272.10	11701.43	30.69N	696.21W	4.39	696.82	797315.30	547903.83
11983.00	34.40	274.10	11718.69	31.33N	708.16W	6.37	708.79	797303.35	547904.47
12015.00	33.40	276.40	11745.25	32.96N	725.93W	5.08	726.60	797285.58	547906.10
12047.00	33.10	277.00	11772.01	35.01N	743.36W	1.39	744.08	797268.15	547908.15
12079.00	33.40	276.60	11798.77	37.09N	760.78W	1.16	761.55	797250.73	547910.23
12110.00	33.20	277.20	11824.68	39.13N	777.68W	1.24	778.50	797233.84	547912.27
12142.00	33.30	277.20	11851.44	41.33N	795.09W	0.31	795.97	797216.43	547914.47
12205.00	34.40	274.60	11903.77	44.92N	829.99W	2.89	830.96	797181.53	547918.06
12269.00	35.10	274.70	11956.35	47.88N	866.34W	1.10	867.39	797145.17	547921.02
12279.00	35.20	275.20	11964.53	48.38N	872.08W	3.05	873.14	797139.43	547921.52



All data in feet unless otherwise stated. Calculation uses minimum curvature method.
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NO PROPOSAL