

Results of Directional Survey

V

API number:	30-025-39922		
OGRID:		Operator:	ENSTOR GRAMA RIDGE STORAGE AND TRANSP
		Property:	GRM UNIT # 8

surface	ULSTR:	P	04	T 22S	R 34E
				126 FSL	1248 FEL

BH Loc	ULSTR:	P	04	T 22S	R 34E
13460	MD	13457.3	TVD	214 FSL	1308 FEL

Top Perf/OH	ULSTR:	P	04	T 22S	R 34E
12811	MD	12808.8	TVD	205 FSL	1301 FEL

Bot Perf/OH	ULSTR:	P	04	T 22S	R 34E
13030	MD	13027.9	TVD	208 FSL	1303 FEL

	MD	N/S	E/W	VD
	12800	78.89	-52.74	12797.8
TOP PERFS/OH	12811	79.07	-52.87	12808.80
	13000	82.08	-55.03	12997.76
	13000	82.08	-55.03	12997.76
BOT PERFS/OH	13030	82.46	-55.38	13027.91
	13200	84.64	-57.36	13198.73

NEXT TO LAST	13200	84.64	-57.36	13198.73
LAST READING	13380	87.00	-59.38	13377.71
TD	13460	88.05	-60.28	13457.26

Surface Location	126 FS	1248 FE
Projected BHL	214 FS	1308 FE
Location of		
Top Perfs/OH	205 FS	1301 FE
Bottom Perfs/OH	208 FS	1303 FE

SUMMARY of Subsurface Locations

Surface Location	P-04-22S-34E	126 FS	1248 FE	Vert. Depth
Top Perfs/OH	P-04-22S-34E	205 FS	1301 FE	12808.80
Bottom Perfs/OH	P-04-22S-34E	208 FS	1303 FE	13027.91
Projected TD	P-04-22S-34E	214 FS	1308 FE	13457.26

SEP 08 2012



August 24, 2012

HOBBS OCD

AUG 27 2012

RECEIVED

Paul Kautz
Oil Conservation Division
1625 N. French Dr.
Hobbs, NM 88240

**RE: Enstor Grama Ridge Storage and Transportation, LLC
Grama Ridge Morrow Unit No. 8 Well
Sec. 4, T-22S, R-34E, Lea County, NM
Accepted BLM Sundry Form 3160-4**

Dear Paul,

Pursuant to our email exchange earlier today, enclosed you will find a copy of the "Accepted For Record" BLM Form 3160-4, Well Completion or Recompletion Report and Log, for the subject well.

Should you require any additional information or if I can be of further assistance, please contact me directly at (281) 374-3062 or daryl.gee@enstorinc.com

Regards,

Daryl W. Gee
Director, Regulatory Affairs & Land Management

Enclosures: BLM Sundry 3160-4

SUR: P-04-22s-34e, 126/S & 1248/E
BHL: P-04-22s-34e, 214/S & 1308/E
API # 30-025-39922



Job Number: SVCO-110070
 Company: Essex Energy Storage Services
 Lease/Well: Grama Ridge Storage 8
 Location: Lea County, NM
 Rig Name: Acacia #9
 RKB: 27'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 7.54°
 Grid: East To Grid
 File name: F:\SURVEY\2011\SU-1\ESSEX\GRAMA8.SVY
 Date/Time: 24-Jan-11 / 08:40
 Curve Name: 9200' - 13380' M.D. (Gyroscopic)

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
9030.00	2.50	280.54	9028.53	60.00	-35.22	60.00	69.57	329.59	.00
Tied Gyroscopic Surveys Into Previous Gyroscopic Surveys									
9200.00	3.25	276.94	9198.31	61.26	-43.65	61.26	75.22	324.53	.45
9400.00	1.75	297.07	9398.12	63.34	-52.00	63.34	81.95	320.62	.86
9600.00	.25	216.68	9598.09	64.38	-54.98	64.38	84.66	319.50	.86
9800.00	.25	237.30	9798.09	63.79	-55.60	63.79	84.62	318.92	.04
10000.00	.25	220.92	9998.09	63.22	-56.26	63.22	84.63	318.34	.04
10200.00	.25	217.54	10198.08	62.55	-56.81	62.55	84.50	317.75	.01
10400.00	.25	208.76	10398.08	61.82	-57.28	61.82	84.28	317.18	.02

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
10600.00	.50	60.98	10598.08	61.86	-56.73	61.86	83.94	317.48	.36
10800.00	.25	91.20	10798.08	62.28	-55.53	62.28	83.44	318.28	.16
11000.00	.25	138.42	10998.07	61.94	-54.81	61.94	82.71	318.50	.10
11200.00	.50	151.64	11198.07	60.85	-54.10	60.85	81.42	318.36	.13
11400.00	.50	132.91	11398.06	59.48	-53.05	59.48	79.70	318.27	.08
11600.00	.50	49.13	11598.06	59.46	-51.75	59.46	78.83	318.97	.33
11800.00	1.25	65.35	11798.03	60.94	-49.11	60.94	78.26	321.14	.39
12000.00	1.25	24.31	11997.99	63.84	-46.23	63.84	78.82	324.09	.44
12200.00	1.50	343.04	12197.94	68.33	-46.09	68.33	82.42	326.00	.50
12400.00	1.00	331.76	12397.89	72.37	-47.68	72.37	86.67	326.62	.28
12600.00	1.25	317.49	12597.85	75.52	-49.98	75.52	90.56	326.50	.19
12800.00	1.25	324.01	12797.80	78.89	-52.74	78.89	94.89	326.24	.07
13000.00	1.00	324.72	12997.76	82.08	-55.03	82.08	98.82	326.16	.13
13200.00	1.00	310.39	13197.73	84.64	-57.36	84.64	102.24	325.87	.12
Last Survey Depth Recorded									
13380.00	1.00	328.69	13377.71	87.00	-59.38	87.00	105.33	325.69	.18

Client : NGAS - Essex
 Well : Grama Ridge Unit 8
 Location : Lea Co, NM
 License :

Page: 1
 Date : 12/16/2010
 File :

UWI #:

Vertical Section Calculated Along Azimuth 0.00°

KB Elevation = 0.00ft

	MD ft	Inc deg	Azi deg	TVD ft	North ft	East ft	V'Sect ft	D'Leg °/100	Build °/100	Turn °/100
Start Gyro										
0	200.00	0.25	330.45	200.00	0.38	-0.22	0.38	0.00	0.00	0.00
1	400.00	0.50	329.40	400.00	1.51	-0.88	1.51	0.13	0.13	-0.53
2	600.00	0.75	310.35	599.98	3.11	-2.32	3.11	0.16	0.12	-9.52
3	800.00	0.75	316.31	799.97	4.90	-4.22	4.90	0.04	0.00	2.98
4	1000.00	0.50	324.14	999.95	6.56	-5.64	6.56	0.13	-0.12	3.91
5	1200.00	0.75	321.09	1199.94	8.28	-6.97	8.28	0.13	0.12	-1.53
6	1400.00	0.50	344.04	1399.93	10.14	-8.03	10.14	0.17	-0.12	11.48
7	1600.00	0.75	7.00	1599.92	12.28	-8.11	12.28	0.17	0.12	11.48
8	1800.00	1.00	55.95	1799.90	14.56	-6.51	14.56	0.38	0.12	24.48
9	2000.00	1.50	85.89	1999.85	15.72	-2.45	15.72	0.40	0.25	14.97
10	2200.00	1.00	96.74	2199.80	15.70	1.89	15.70	0.28	-0.25	5.42
11	2400.00	0.75	75.59	2399.78	15.82	4.89	15.82	0.20	-0.12	-10.58
12	2600.00	0.50	105.44	2599.77	15.92	7.00	15.92	0.20	-0.12	14.92
13	2800.00	0.50	87.85	2799.76	15.72	8.72	15.72	0.08	0.00	-8.80
14	3000.00	1.25	52.70	2999.74	17.07	11.32	17.07	0.44	0.37	-17.58
15	3200.00	1.75	54.55	3199.67	20.17	15.55	20.17	0.25	0.25	0.93
16	3400.00	1.75	52.40	3399.58	23.80	20.45	23.80	0.03	0.00	-1.07
17	3600.00	1.50	50.26	3599.50	27.34	24.89	27.34	0.13	-0.12	-1.07
18	3800.00	1.00	50.11	3799.45	30.13	28.24	30.13	0.25	-0.25	-0.07
19	4000.00	0.50	1.11	3999.43	32.12	29.59	32.12	0.39	-0.25	-24.50
20	4200.00	0.50	24.17	4199.42	33.79	29.97	33.79	0.10	0.00	11.53
21	4400.00	0.50	232.22	4399.42	34.05	29.64	34.05	0.49	0.00	-75.97
22	4600.00	0.75	296.28	4599.41	34.10	27.77	34.10	0.35	0.12	32.03
23	4800.00	0.75	323.48	4799.39	35.73	25.82	35.73	0.18	0.00	13.60
24	5000.00	0.75	332.54	4999.38	37.94	24.44	37.94	0.06	0.00	4.53
25	5200.00	0.75	21.59	5199.36	40.32	24.32	40.32	0.31	0.00	24.52
26	5400.00	0.75	351.67	5399.35	42.83	24.61	42.83	0.19	0.00	-14.96
27	5600.00	0.75	341.72	5599.33	45.37	24.01	45.37	0.07	0.00	-4.97
28	5800.00	0.75	317.65	5799.31	47.58	22.71	47.58	0.16	0.00	-12.04
29	6000.00	0.75	328.58	5999.30	49.66	21.15	49.66	0.07	0.00	5.46
30	6200.00	1.00	331.39	6199.27	52.31	19.63	52.31	0.13	0.12	1.40
31	6400.00	1.00	334.34	6399.24	55.42	18.04	55.42	0.03	0.00	1.48
32	6600.00	1.00	292.28	6599.21	57.65	15.67	57.65	0.36	0.00	-21.03
33	6800.00	1.25	310.21	6799.18	59.72	12.39	59.72	0.21	0.12	8.97
34	7000.00	1.00	295.14	6999.14	61.87	9.14	61.87	0.19	-0.12	-7.54
35	7200.00	1.00	289.97	7199.11	63.21	5.92	63.21	0.05	0.00	-2.58