



dugan production corp.

March 24, 2005

New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Re: Dugan Production Corp.
State Com #2B
API #30 045 32631
Unit D Sec. 16, T32N, R12W
San Juan County, NM

Srf 1120/N 905/W
B/L 1091/N 803/W

Ladies/Gentlemen:

Attached is the survey made by the steering company while drilling this well.

If you have any questions, please contact me at 325-1821.

Sincerely,

John Alexander
Vice-President

JA/tmf

State of New Mexico) ss
County of San Juan)



Subscribed and sworn to before me this 24th day of March, 2005.

Notary Public

My Commission Expires: 03/07/07



Scientific Drilling International

Survey Completion Report

Company: Dugan Production Corp. **Date:** 2005-03-17 **Time:** 10:39:08 **Page:** 1
Field: San Juan County, NM **Co-ordinate(NE) Reference:** Well: 2B, True North
Site: State Com **Vertical (TVD) Reference:** GL 6082' 2B 6082.0
Well: 2B **Section (VS) Reference:** Well (0.00N,0.00E,285.97Azi)
Wellpath: OH **Survey Calculation Method:** Minimum Curvature **Db:** Sybase

Survey: Survey #1 **Start Date:** 2005-02-17
Company: Scientific Drilling Internatio **Engineer:** J. Moore, S. Robertson
Tool: MWD-SDI; **Tied-to:** From Surface

Field: San Juan County, NM
 USA
Map System: US State Plane Coordinate System 1927 **Map Zone:** New Mexico, Western Zone
Geo Datum: NAD27 (Clarke 1866) **Coordinate System:** Well Centre
Sys Datum: Mean Sea Level **Geomagnetic Model:** igrf2005

Site: State Com
 Sec. 16, T32N, R12W
Site Position: **Northing:** 2180242.40 ft **Latitude:** 36 59 29.000 N
From: Geographic **Easting:** 422607.16 ft **Longitude:** 108 5 54.000 W
Position Uncertainty: 0.00 ft **North Reference:** True
Ground Level: 6045.00 ft **Grid Convergence:** -0.16 deg

Well: 2B **Slot Name:**
Well Position: +N/-S -404.43 ft **Northing:** 2179844.07 ft **Latitude:** 36 59 25.000 N
 +E/-W -2190.41 ft **Easting:** 420415.63 ft **Longitude:** 108 6 21.000 W
Position Uncertainty: 0.00 ft

Wellpath: OH **Drilled From:** Surface
Current Datum: GL 6082' 2B **Tie-on Depth:** 0.00 ft
Magnetic Data: 2005-02-17 **Height** 6082.00 ft **Above System Datum:** Mean Sea Level
Field Strength: 51519 nT **Declination:** 10.83 deg
Vertical Section: Depth From (TVD) +N/-S **Mag Dip Angle:** 63.76 deg
 ft ft **+E/-W** **Direction**
 0.00 0.00 0.00 285.97 deg

Survey

Meas Depth ft	Inclination deg	Azimuth deg	TVD ft	Vert Sect ft	N/S ft	E/W ft	DLS deg/100ft	CLen ft	CLSD ft	CLSA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
269.00	0.09	193.93	269.00	-0.01	-0.21	-0.05	0.03	269.00	0.21	193.93
328.00	0.09	311.17	328.00	0.03	-0.22	-0.10	0.26	59.00	0.24	203.82
388.00	0.26	319.18	388.00	0.19	-0.09	-0.22	0.29	60.00	0.24	248.88
447.00	0.35	336.93	447.00	0.41	0.18	-0.38	0.22	59.00	0.42	295.57
508.00	0.62	330.95	508.00	0.77	0.64	-0.61	0.45	61.00	0.89	316.32
569.00	0.97	331.04	568.99	1.36	1.38	-1.02	0.57	61.00	1.72	323.49
635.00	0.88	306.34	634.98	2.23	2.17	-1.70	0.61	66.00	2.76	321.91
698.00	1.06	297.29	697.97	3.26	2.72	-2.61	0.37	63.00	3.77	316.24
750.00	1.14	302.83	749.96	4.23	3.23	-3.47	0.26	52.00	4.74	312.90
823.00	1.49	302.30	822.94	5.83	4.13	-4.88	0.48	73.00	6.39	310.20
885.00	1.67	300.10	884.92	7.48	5.01	-6.35	0.31	62.00	8.09	308.29
948.00	1.93	300.72	947.89	9.40	6.01	-8.05	0.41	63.00	10.05	306.75
1011.00	2.46	292.63	1010.84	11.77	7.07	-10.21	0.97	63.00	12.42	304.71
1073.00	2.02	297.29	1072.80	14.16	8.09	-12.41	0.77	62.00	14.81	303.09
1135.00	1.32	284.11	1134.77	15.94	8.76	-14.08	1.28	62.00	16.58	301.90
1197.00	2.20	307.31	1196.74	17.77	9.66	-15.72	1.80	62.00	18.45	301.57
1259.00	2.99	305.82	1258.68	20.40	11.33	-17.97	1.28	62.00	21.24	302.22
1322.00	2.81	303.36	1321.60	23.41	13.14	-20.59	0.35	63.00	24.43	302.53
1383.00	2.64	295.89	1382.53	26.23	14.57	-23.11	0.64	61.00	27.32	302.24
1447.00	1.85	271.89	1446.48	28.68	15.25	-25.47	1.89	64.00	29.68	300.91
1511.00	2.02	274.79	1510.44	30.79	15.38	-27.62	0.31	64.00	31.62	299.11
1574.00	1.85	290.08	1573.41	32.89	15.82	-29.68	0.86	63.00	33.64	298.06
1637.00	1.76	297.03	1636.38	34.86	16.61	-31.50	0.38	63.00	35.61	297.80



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Survey

Meas Depth ft	Inclination deg	Azimuth deg	TVD ft	Vert Sect ft	N/S ft	E/W ft	DLS deg/100ft	CLen ft	ClsD ft	ClsA deg
1699.00	3.34	295.62	1698.31	37.57	17.82	-33.98	2.55	62.00	38.37	297.68
1761.00	4.22	291.75	1760.18	41.62	19.45	-37.73	1.48	62.00	42.44	297.27
1824.00	3.69	278.66	1823.03	45.94	20.61	-41.88	1.66	63.00	46.68	296.21
1887.00	2.90	261.87	1885.92	49.40	20.69	-45.46	1.97	63.00	49.95	294.47
1950.00	3.08	258.71	1948.84	52.36	20.14	-48.70	0.39	63.00	52.70	292.46
2012.00	3.08	272.33	2010.75	55.46	19.88	-52.00	1.18	62.00	55.67	290.92
2075.00	2.90	281.65	2073.66	58.70	20.27	-55.25	0.82	63.00	58.85	290.15
2138.00	3.25	292.37	2136.57	62.06	21.27	-58.46	1.07	63.00	62.21	289.99
2201.00	3.78	293.86	2199.46	65.89	22.79	-62.01	0.85	63.00	66.07	290.18
2265.00	2.55	289.29	2263.36	69.40	24.11	-65.29	1.96	64.00	69.60	290.27
2322.00	1.41	288.50	2320.32	71.37	24.76	-67.15	2.00	57.00	71.57	290.24
2384.00	1.14	309.07	2382.31	72.70	25.39	-68.35	0.85	62.00	72.91	290.37
2447.00	1.58	324.45	2445.29	73.96	26.49	-69.34	0.90	63.00	74.23	290.91
2511.00	1.85	295.71	2509.26	75.66	27.65	-70.79	1.39	64.00	76.00	291.34
2574.00	2.02	262.75	2572.23	77.69	27.95	-72.81	1.76	63.00	77.99	291.01
2636.00	1.41	183.12	2634.21	78.52	27.05	-73.93	3.62	62.00	78.73	290.10
2697.00	2.29	111.32	2695.18	77.14	25.86	-72.84	3.74	61.00	77.29	289.55
2759.00	2.99	320.76	2757.16	77.24	26.66	-72.70	8.24	62.00	77.44	290.14
2820.00	5.28	303.71	2817.99	81.22	29.46	-76.05	4.22	61.00	81.55	291.17
2883.00	1.67	317.16	2880.87	84.76	31.74	-79.08	5.84	63.00	85.21	291.87
2946.00	1.67	133.82	2943.86	84.74	31.78	-79.05	5.30	63.00	85.19	291.90
3010.00	1.85	142.69	3007.83	83.08	30.31	-77.75	0.51	64.00	83.44	291.30
3071.00	0.97	214.41	3068.81	82.46	29.10	-77.44	2.95	61.00	82.73	290.59
3124.00	1.76	264.77	3121.80	83.36	28.65	-78.51	2.57	53.00	83.57	290.05
3188.00	1.67	254.58	3185.77	85.07	28.32	-80.38	0.50	64.00	85.22	289.41
3250.00	1.41	213.97	3247.75	86.08	27.44	-81.68	1.77	62.00	86.17	288.57
3313.00	1.23	203.95	3310.74	86.41	26.18	-82.39	0.46	63.00	86.45	287.63
3375.00	1.58	229.09	3372.72	86.97	25.02	-83.30	1.13	62.00	86.98	286.71
3437.00	1.32	263.81	3434.70	88.10	24.38	-84.66	1.45	62.00	88.10	286.06
3501.00	1.58	301.77	3498.68	89.63	24.76	-86.14	1.52	64.00	89.63	286.04
3564.00	2.64	298.43	3561.64	91.88	25.91	-88.16	1.69	63.00	91.89	286.38
3628.00	2.55	291.93	3625.57	94.74	27.15	-90.77	0.48	64.00	94.75	286.65
3690.00	1.85	258.97	3687.53	97.00	27.47	-93.04	2.29	62.00	97.01	286.45
3752.00	2.46	238.05	3749.48	98.79	26.57	-95.15	1.59	62.00	98.79	285.60
3816.00	1.76	252.03	3813.44	100.52	25.54	-97.25	1.35	64.00	100.55	284.72
3878.00	1.06	278.92	3875.42	101.88	25.34	-98.72	1.52	62.00	101.92	284.40
3941.00	2.02	283.23	3938.40	103.57	25.68	-100.38	1.53	63.00	103.61	284.35
4004.00	1.58	286.66	4001.37	105.55	26.19	-102.29	0.72	63.00	105.59	284.36
4067.00	0.35	12.61	4064.36	106.43	26.62	-103.08	2.53	63.00	106.46	284.48
4129.00	1.23	27.47	4126.35	106.30	27.40	-102.73	1.45	62.00	106.32	284.93
4157.00	1.41	8.22	4154.34	106.29	28.01	-102.54	1.70	28.00	106.30	285.28
4172.66	1.41	8.22	4170.00	106.34	28.39	-102.49	0.00	15.66	106.35	285.48
4210.00	1.41	8.22	4207.33	106.47	29.30	-102.36	0.00	37.34	106.47	285.97

Annotation

MD ft	TVD ft	
4210.00	4207.33	Projection to TD

