

30-015-41294



July 29, 2015

NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 16 2015

Devon Energy Production Co., L. P.
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010

RECEIVED

Attn: Megan Moravec

Re: Tranquil 13 State Com No 002H

Please find enclosed a copy of the survey from 0' to 688' ran on the above referenced well.

If I can be of any further service please do not hesitate to call me at 800-606-4976.

Sincerely,

A handwritten signature in black ink, appearing to read "KH" or "K. Havelka", written over the word "Sincerely,".

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 29 day of July,
A.D., 2015, by Keith Havelka.

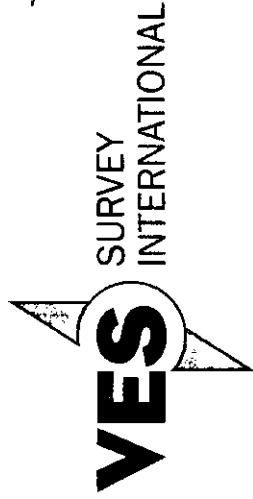
A handwritten signature in black ink, appearing to read "Jennifer Ann Byerly", written over the printed name and title.
Jennifer Ann Byerly
Notary Public, State of Texas





Company: Devon Energy

Lease/Well: Tranquil 13 State Com No/002H



Rig Name: Precision 608

State/County: New Mexico/Eddy

VS-Azi: 0.00 Degrees

Latitude: 32.12270, Longitude: -104.13530

Grid North = True North -0.11 degs

Grid Convergence Applied = -0.11 degs

Depth Reference : RKB= 25

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: tranquil13statecom2h-de_01.ut

Minimum Curvature Method

Report Date/Time: 7/29/2015 / 12:54

VES Survey International

Ft. Worth, Texas

817-741-3610

Surveyor: Gregg Wilson

Tranquil 13 State Com No 002H / API 30-015-41294

NM OIL CONSERVATION
ARTESIA DISTRICT

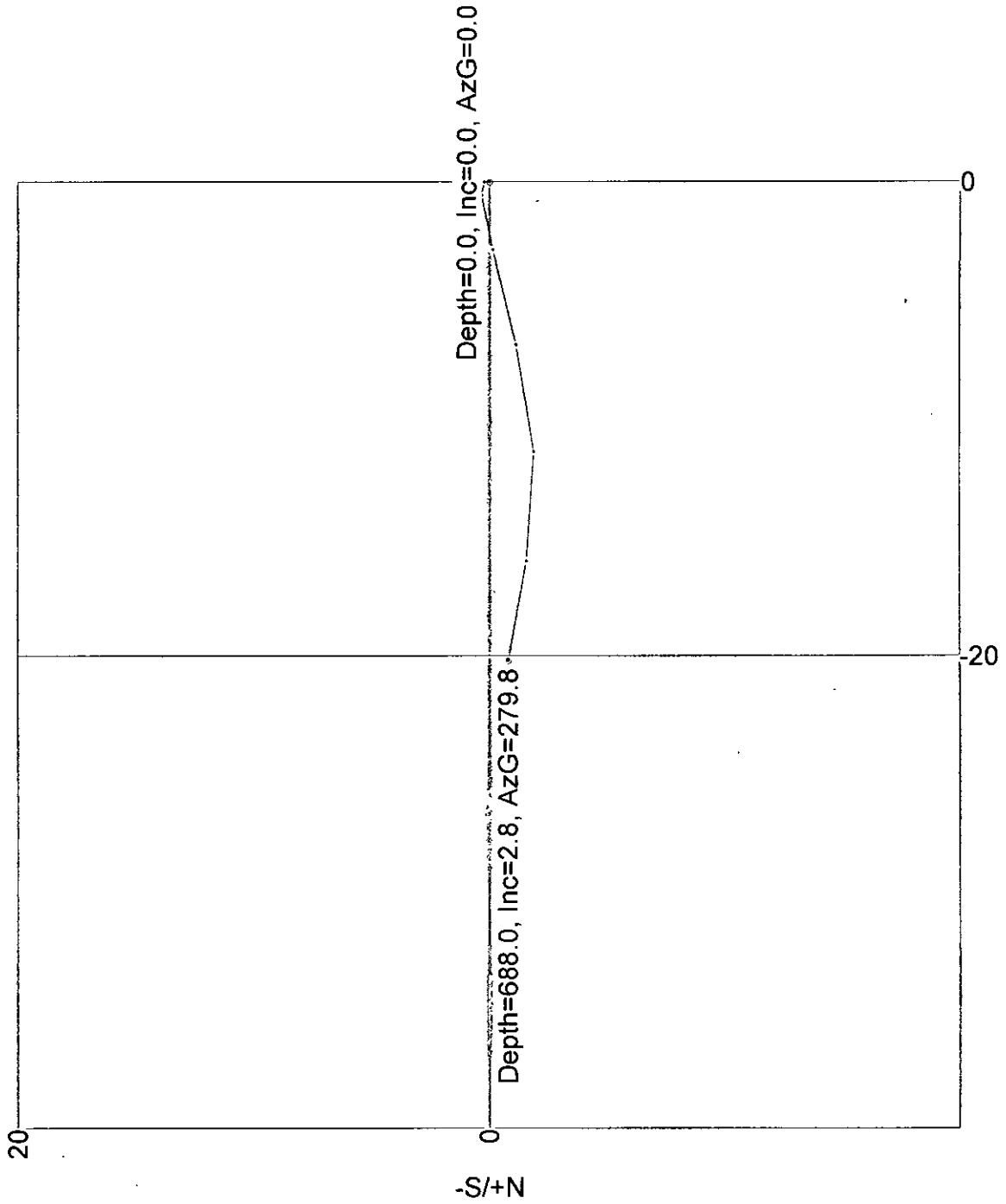
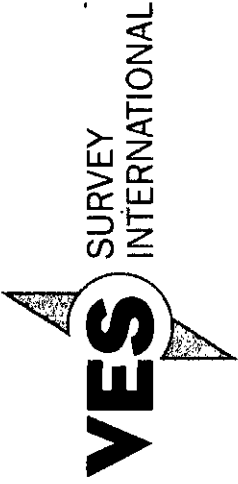
NOV 16 2015

RECEIVED

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.25	358.52	100.00	0.22	-0.01	0.22	0.22	358.52	0.25
200.00	0.65	259.09	200.00	0.34	-0.57	0.34	0.66	300.47	0.74
300.00	2.03	257.99	299.97	-0.14	-2.87	-0.14	2.87	267.20	1.38
400.00	2.71	255.03	399.88	-1.12	-6.88	-1.12	6.97	260.76	0.69
500.00	2.57	266.42	499.78	-1.87	-11.40	-1.87	11.55	260.69	0.54
600.00	2.76	280.88	599.67	-1.55	-16.00	-1.55	16.08	264.45	0.70
688.00	2.79	279.83	687.57	-0.79	-20.20	-0.79	20.21	267.76	0.07



VES Survey International
Ft. Worth, Texas
817-741-3610
Surveyor: Gregg Wilson
Tranquil 13 State Com No 002H / API 30-015-41294



VES Survey Date: 7/24/2015



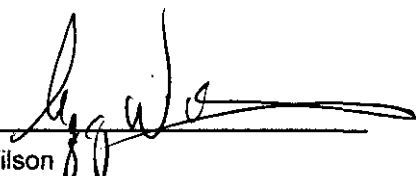
NM OIL CONSERVATION

ARTESIA DISTRICT

NOV 16 2015

RECEIVED

I Gregg Wilson certify that I am employed by Vaughn Energy Services. That I did on the day(s) of 07/24/15 through 07/24/15 conduct or supervise the taking of a HA Gyro survey from a depth of 0 feet to a depth of 688 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Devon for the Tranquil 13 State Com No Well # 002H API # 30-015-41294 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services



Gregg Wilson
Service Technician
Vaughn Energy Services



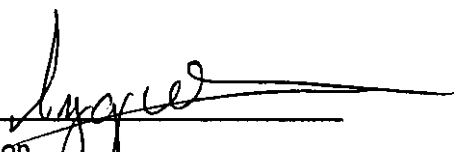
NM OIL CONSERVATION

ARTESIA DISTRICT

NOV 16 2015

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I Gregg Wilson certify that I am employed by Vaughn Energy Services. That I did on the day(s) of 07/24/15 through 07/24/15 conduct or supervise the taking of a HA Gyro survey from a depth of 0 feet to a depth of 688 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Devon for the Tranquil 13 State Com No Well # 002H API # 30-015-41294 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services



Gregg Wilson
Service Technician
Vaughn Energy Services



Directional Survey

Well Name: TRANQUIL 13 STATE COM 2H

Sub-Division DELAWARE BASIN WEST		Region BASIN WEST		Field Name HAY HOLLOW NORTH		County EDDY		State/Province NM					
Surface Legal Location SEC13 T25S R27E		API/UWI 3001541294		Latitude (°) 32° 7' 24.954" N		Longitude (°) 104° 8' 28.026" W		Orig KB Elevation (ft) 3,107.00		Ground Elev MSL (ft) 3,082.00		KB - GL (ft) 25.00	
Wellbores													
Wellbore Name OH		Parent Wellbore OH				SAP Well ID 38624				Vertical Section Direction (°) 357.47			
Kick Offs & Key Depths													
Date 8/1/2015				Type CURVE				Top Depth (ftKB) 7,259.0					
Date 8/4/2015				Type LATERAL				Top Depth (ftKB) 8,220.0					
Actual Deviation Survey EXTREME SURVEY , Proposed? No				Definitive? No		Proposed? No		Proposed Deviation Survey					
Deviation Survey													
Date 7/23/2015				Description EXTREME SURVEY									
MD Tie In (ftKB)		TVD Tie In (ftKB)		Inclination Tie In (°)		Azimuth Tie In (°)		NSTie In (ft)		EWTie In (ft)			
Survey Data													
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company			
7/23/2015	100.00	0.25	358.52	100.00	0.22	0.22	-0.01	0.25	MWD	EXTREME SURVEY			
7/23/2015	200.00	0.65	259.09	200.00	0.35	0.33	-0.57	0.73	MWD	EXTREME SURVEY			
7/23/2015	300.00	2.03	257.99	299.97	-0.02	-0.15	-2.86	1.38	MWD	EXTREME SURVEY			
7/23/2015	400.00	2.71	255.03	399.88	-0.82	-1.13	-6.87	0.69	MWD	EXTREME SURVEY			
7/23/2015	500.00	2.57	266.42	499.78	-1.37	-1.88	-11.40	0.54	MWD	EXTREME SURVEY			
7/23/2015	600.00	2.76	280.88	599.67	-0.85	-1.56	-16.00	0.70	MWD	EXTREME SURVEY			
7/25/2015	713.00	2.90	280.12	712.53	0.40	-0.55	-21.48	0.13	MWD	EXTREME SURVEY			
7/25/2015	808.00	2.90	277.79	807.41	1.36	0.20	-26.23	0.12	MWD	EXTREME SURVEY			
7/25/2015	902.00	2.99	274.89	901.29	2.10	0.73	-31.03	0.19	MWD	EXTREME SURVEY			
7/25/2015	997.00	3.21	278.89	996.15	2.95	1.35	-36.13	0.32	MWD	EXTREME SURVEY			
7/25/2015	1,091.00	3.12	287.99	1,090.00	4.37	2.55	-41.16	0.54	MWD	EXTREME SURVEY			
7/25/2015	1,186.00	2.90	293.61	1,184.87	6.33	4.31	-45.82	0.39	MWD	EXTREME SURVEY			
7/25/2015	1,281.00	3.21	301.61	1,279.74	8.88	6.67	-50.29	0.55	MWD	EXTREME SURVEY			
7/25/2015	1,370.00	3.21	303.90	1,368.60	11.76	9.36	-54.48	0.14	MWD	EXTREME SURVEY			
7/25/2015	1,459.00	2.90	307.59	1,457.47	14.69	12.13	-58.33	0.41	MWD	EXTREME SURVEY			
7/25/2015	1,549.00	2.90	326.09	1,547.36	18.10	15.41	-61.40	1.04	MWD	EXTREME SURVEY			
7/25/2015	1,638.00	2.42	3.62	1,636.27	21.89	19.15	-62.54	1.99	MWD	EXTREME SURVEY			
7/25/2015	1,727.00	2.29	32.62	1,725.20	25.21	22.52	-61.46	1.33	MWD	EXTREME SURVEY			
7/25/2015	1,817.00	1.89	30.60	1,815.14	27.93	25.32	-59.74	0.45	MWD	EXTREME SURVEY			
7/25/2015	1,906.00	1.41	49.19	1,904.10	29.84	27.29	-58.16	0.80	MWD	EXTREME SURVEY			
7/25/2015	1,995.00	2.90	75.60	1,993.04	30.98	28.57	-55.15	1.97	MWD	EXTREME SURVEY			
7/25/2015	2,085.00	4.70	77.71	2,082.84	32.07	29.92	-49.34	2.01	MWD	EXTREME SURVEY			
7/25/2015	2,174.00	6.20	76.00	2,171.43	33.64	31.86	-41.12	1.70	MWD	EXTREME SURVEY			
7/25/2015	2,263.00	5.70	75.21	2,259.95	35.54	34.15	-32.18	0.57	MWD	EXTREME SURVEY			
7/25/2015	2,407.33	4.79	73.71	2,403.68	38.49	37.67	-19.47	0.64	MWD	EXTREME SURVEY			
7/25/2015	2,500.00	4.79	72.70	2,496.02	40.40	39.91	-12.06	0.09	MWD	EXTREME SURVEY			
7/25/2015	2,590.00	4.61	72.92	2,585.72	42.27	42.09	-5.01	0.20	MWD	EXTREME SURVEY			
7/25/2015	2,679.00	4.31	73.71	2,674.45	43.96	44.08	1.61	0.34	MWD	EXTREME SURVEY			
7/25/2015	2,768.00	4.31	76.61	2,763.20	45.39	45.79	8.08	0.24	MWD	EXTREME SURVEY			
7/25/2015	2,858.00	4.00	75.91	2,852.96	46.65	47.34	14.41	0.35	MWD	EXTREME SURVEY			
7/25/2015	2,947.00	4.09	76.00	2,941.74	47.91	48.86	20.50	0.10	MWD	EXTREME SURVEY			
7/25/2015	3,036.00	4.09	73.93	3,030.51	49.28	50.51	26.63	0.17	MWD	EXTREME SURVEY			
7/25/2015	3,126.00	3.78	75.21	3,120.30	50.66	52.15	32.58	0.36	MWD	EXTREME SURVEY			
7/25/2015	3,215.00	3.69	76.13	3,209.11	51.85	53.59	38.20	0.12	MWD	EXTREME SURVEY			
7/25/2015	3,304.00	3.21	79.29	3,297.95	52.77	54.74	43.43	0.58	MWD	EXTREME SURVEY			
7/25/2015	3,394.00	3.38	76.13	3,387.80	53.65	55.84	48.48	0.28	MWD	EXTREME SURVEY			
7/25/2015	3,483.00	3.38	79.03	3,476.65	54.55	56.97	53.60	0.19	MWD	EXTREME SURVEY			
7/25/2015	3,572.00	3.30	74.90	3,565.50	55.49	58.13	58.65	0.28	MWD	EXTREME SURVEY			
7/25/2015	3,662.00	3.21	79.03	3,655.35	56.42	59.29	63.63	0.28	MWD	EXTREME SURVEY			
7/25/2015	3,751.00	3.38	75.29	3,744.20	57.34	60.43	68.61	0.31	MWD	EXTREME SURVEY			
7/25/2015	3,840.00	3.38	77.49	3,833.05	58.35	61.66	73.71	0.15	MWD	EXTREME SURVEY			
7/25/2015	3,930.00	3.21	77.40	3,922.90	59.25	62.79	78.76	0.19	MWD	EXTREME SURVEY			
7/25/2015	4,019.00	3.30	83.73	4,011.76	59.85	63.61	83.74	0.42	MWD	EXTREME SURVEY			
7/25/2015	4,108.00	3.38	83.99	4,100.61	60.18	64.17	88.89	0.09	MWD	EXTREME SURVEY			
7/25/2015	4,197.00	3.30	78.33	4,189.45	60.75	64.96	94.01	0.38	MWD	EXTREME SURVEY			
7/25/2015	4,286.00	3.30	78.72	4,278.31	61.54	65.98	99.03	0.03	MWD	EXTREME SURVEY			
7/25/2015	4,376.00	3.30	83.42	4,368.16	62.12	66.78	104.15	0.30	MWD	EXTREME SURVEY			
7/25/2015	4,465.00	3.30	86.32	4,457.01	62.35	67.24	109.25	0.19	MWD	EXTREME SURVEY			
7/25/2015	4,554.00	3.21	86.81	4,545.87	62.43	67.54	114.29	0.11	MWD	EXTREME SURVEY			
7/25/2015	4,644.00	2.90	86.63	4,635.74	62.49	67.82	119.08	0.34	MWD	EXTREME SURVEY			
7/25/2015	4,733.00	2.99	91.60	4,724.62	62.36	67.88	123.65	0.30	MWD	EXTREME SURVEY			
7/25/2015	4,823.00	2.90	87.73	4,814.50	62.18	67.91	128.27	0.24	MWD	EXTREME SURVEY			
7/25/2015	4,912.00	2.68	92.39	4,903.40	61.99	67.91	132.60	0.35	MWD	EXTREME SURVEY			
7/25/2015	5,002.00	2.68	94.72	4,993.30	61.55	67.65	136.80	0.12	MWD	EXTREME SURVEY			
7/25/2015	5,091.00	2.50	94.72	5,082.21	61.04	67.32	140.81	0.20	MWD	EXTREME SURVEY			
7/25/2015	5,180.00	2.59	94.50	5,171.12	60.55	67.00	144.74	0.10	MWD	EXTREME SURVEY			
7/25/2015	5,270.00	2.29	91.11	5,261.04	60.18	66.81	148.57	0.37	MWD	EXTREME SURVEY			
7/25/2015	5,359.00	2.20	95.42	5,349.97	59.84	66.61	152.05	0.21	MWD	EXTREME SURVEY			
7/25/2015	5,449.00	2.29	89.62	5,439.90	59.53	66.46	155.57	0.27	MWD	EXTREME SURVEY			
7/25/2015	5,538.00	2.20	90.89	5,528.83	59.36	66.45	159.05	0.12	MWD	EXTREME SURVEY			
7/25/2015	5,627.00	1.89	99.51	5,617.78	58.95	66.18	162.21	0.49	MWD	EXTREME SURVEY			
7/25/2015	5,716.00	2.20	104.12	5,706.72	58.16	65.52	165.31	0.39	MWD	EXTREME SURVEY			
7/25/2015	5,806.00	2.11	109.70	5,796.66	57.03	64.54	168.55	0.25	MWD	EXTREME SURVEY			
7/25/2015	5,895.00	2.20	108.69	5,885.59	55.80	63.44	171.71	0.11	MWD	EXTREME SURVEY			
7/25/2015	5,985.00	2.29	124.29	5,975.52	54.09	61.87	174.83	0.68	MWD	EXTREME SURVEY			



Directional Survey

Well Name: TRANQUIL 13 STATE COM 2H

Sub-Division DELAWARE BASIN WEST			Region BASIN WEST			Field Name HAY HOLLOW NORTH			County EDDY		State/Province NM		
Surface Legal Location SEC13 T25S R27E			API/UWI 3001541294		Latitude (") 32° 7' 24.954" N		Longitude (") 104° 8' 28.026" W		Orig KB Elevation (ft) 3,107.00		Ground Elev MSL (ft) 3,082.00		KB - GL (ft) 25.00
Survey Data													
Date	MD (ftKB)	Incl (")	Azm (")	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS ("/100ft)	Survey Tool	Survey Company			
7/25/2015	6,074.00	3.30	134.00	6,064.42	51.17	59.09	178.14	1.25	MWD	EXTREME SURVEY			
7/25/2015	6,164.00	4.31	137.70	6,154.22	46.69	54.79	182.28	1.15	MWD	EXTREME SURVEY			
7/25/2015	6,253.00	4.31	143.72	6,242.97	41.34	49.62	186.51	0.51	MWD	EXTREME SURVEY			
7/25/2015	6,342.00	4.00	151.10	6,331.73	35.78	44.21	189.99	0.69	MWD	EXTREME SURVEY			
7/25/2015	6,432.00	3.91	150.70	6,421.52	30.22	38.78	193.01	0.10	MWD	EXTREME SURVEY			
7/25/2015	6,521.00	3.78	152.59	6,510.32	24.85	33.53	195.84	0.20	MWD	EXTREME SURVEY			
7/25/2015	6,610.00	2.99	151.49	6,599.16	20.11	28.89	198.30	0.89	MWD	EXTREME SURVEY			
7/25/2015	6,700.00	2.81	148.99	6,689.05	16.06	24.93	200.56	0.24	MWD	EXTREME SURVEY			
7/25/2015	6,789.00	2.29	152.81	6,777.96	12.52	21.48	202.50	0.61	MWD	EXTREME SURVEY			
7/25/2015	6,878.00	0.88	142.01	6,866.92	10.35	19.36	203.73	1.61	MWD	EXTREME SURVEY			
7/25/2015	7,057.00	0.62	353.42	7,045.92	10.20	19.24	204.46	0.81	MWD	EXTREME SURVEY			
7/25/2015	7,142.00	1.32	341.12	7,130.90	11.59	20.62	204.09	0.85	MWD	EXTREME SURVEY			
7/25/2015	7,232.00	1.41	350.79	7,220.88	13.69	22.70	203.58	0.27	MWD	EXTREME SURVEY			
7/25/2015	7,262.00	2.99	336.20	7,250.86	14.79	23.78	203.21	5.55	MWD	EXTREME SURVEY			
7/25/2015	7,292.00	6.24	336.02	7,280.75	17.03	25.98	202.23	10.83	MWD	EXTREME SURVEY			
7/25/2015	7,322.00	9.94	342.70	7,310.45	21.06	29.95	200.80	12.70	MWD	EXTREME SURVEY			
7/25/2015	7,352.00	13.54	343.76	7,339.82	26.97	35.79	199.04	12.02	MWD	EXTREME SURVEY			
7/25/2015	7,382.00	17.15	344.63	7,368.75	34.70	43.43	196.89	12.06	MWD	EXTREME SURVEY			
7/25/2015	7,411.00	19.79	346.04	7,396.25	43.68	52.32	194.57	9.23	MWD	EXTREME SURVEY			
7/25/2015	7,441.00	21.98	348.15	7,424.28	54.20	62.75	192.19	7.72	MWD	EXTREME SURVEY			
7/25/2015	7,471.00	24.09	352.02	7,451.88	65.84	74.31	190.19	8.65	MWD	EXTREME SURVEY			
7/25/2015	7,500.00	26.56	354.83	7,478.10	78.21	86.63	188.78	9.47	MWD	EXTREME SURVEY			
7/25/2015	7,530.00	29.19	356.59	7,504.61	92.23	100.61	187.74	9.18	MWD	EXTREME SURVEY			
7/25/2015	7,560.00	32.01	356.94	7,530.43	107.49	115.86	186.88	9.42	MWD	EXTREME SURVEY			
7/25/2015	7,589.00	34.56	356.76	7,554.67	123.41	131.75	186.01	8.80	MWD	EXTREME SURVEY			
7/25/2015	7,619.00	36.58	356.24	7,579.08	140.86	149.16	184.94	6.81	MWD	EXTREME SURVEY			
7/25/2015	7,649.00	38.60	355.01	7,602.85	159.14	167.41	183.54	7.18	MWD	EXTREME SURVEY			
7/25/2015	7,679.00	40.10	353.77	7,626.04	178.14	186.34	181.68	5.65	MWD	EXTREME SURVEY			
7/25/2015	7,709.00	41.24	351.84	7,648.80	197.62	205.73	179.22	5.66	MWD	EXTREME SURVEY			
7/25/2015	7,739.00	43.44	350.61	7,670.97	217.70	225.70	176.14	7.84	MWD	EXTREME SURVEY			
7/25/2015	7,768.00	46.25	350.08	7,691.53	237.99	245.86	172.71	9.77	MWD	EXTREME SURVEY			
7/25/2015	7,798.00	49.77	351.14	7,711.60	260.13	267.85	169.07	12.02	MWD	EXTREME SURVEY			
7/25/2015	7,828.00	53.46	352.90	7,730.23	283.53	291.14	165.82	13.13	MWD	EXTREME SURVEY			
7/25/2015	7,857.00	56.10	353.77	7,746.95	307.16	314.67	163.07	9.43	MWD	EXTREME SURVEY			
7/25/2015	7,887.00	59.00	353.77	7,763.04	332.42	339.83	160.33	9.67	MWD	EXTREME SURVEY			
7/25/2015	7,917.00	61.55	354.13	7,777.92	358.42	365.73	157.58	8.56	MWD	EXTREME SURVEY			
7/25/2015	7,946.00	64.89	354.65	7,790.98	384.27	391.50	155.05	11.63	MWD	EXTREME SURVEY			
7/25/2015	7,976.00	68.41	354.83	7,802.87	411.78	418.92	152.53	11.75	MWD	EXTREME SURVEY			
7/25/2015	8,006.00	70.70	355.01	7,813.35	439.86	446.92	150.04	7.65	MWD	EXTREME SURVEY			
7/25/2015	8,036.00	72.63	355.36	7,822.79	468.31	475.29	147.65	6.53	MWD	EXTREME SURVEY			
7/25/2015	8,066.00	74.57	355.53	7,831.26	497.07	503.98	145.37	6.49	MWD	EXTREME SURVEY			
7/25/2015	8,096.00	77.12	355.71	7,838.59	526.14	532.98	143.14	8.52	MWD	EXTREME SURVEY			
7/25/2015	8,125.00	79.67	355.71	7,844.43	554.53	561.31	141.02	8.79	MWD	EXTREME SURVEY			
7/25/2015	8,155.00	82.04	356.06	7,849.19	584.14	590.85	138.89	7.98	MWD	EXTREME SURVEY			
7/25/2015	8,182.00	83.62	356.76	7,852.56	610.92	617.58	137.22	6.39	MWD	EXTREME SURVEY			
7/25/2015	8,212.00	85.12	357.64	7,855.51	640.78	647.40	135.76	5.79	MWD	EXTREME SURVEY			
7/25/2015	8,239.00	85.91	357.82	7,857.62	667.69	674.30	134.69	3.00	MWD	EXTREME SURVEY			
7/25/2015	8,269.00	86.61	357.47	7,859.57	697.63	704.21	133.46	2.61	MWD	EXTREME SURVEY			
7/25/2015	8,299.00	87.32	357.64	7,861.16	727.59	734.14	132.18	2.43	MWD	EXTREME SURVEY			
7/25/2015	8,329.00	87.93	357.11	7,862.41	757.56	764.08	130.81	2.69	MWD	EXTREME SURVEY			
7/25/2015	8,418.00	89.87	357.64	7,864.11	846.54	852.97	126.74	2.26	MWD	EXTREME SURVEY			
7/25/2015	8,507.00	91.54	357.82	7,863.02	935.53	941.89	123.21	1.89	MWD	EXTREME SURVEY			
7/25/2015	8,596.00	91.71	357.82	7,860.50	1,024.49	1,030.79	119.83	0.19	MWD	EXTREME SURVEY			
7/25/2015	8,685.00	91.45	357.29	7,858.04	1,113.46	1,119.67	116.03	0.66	MWD	EXTREME SURVEY			
7/25/2015	8,774.00	89.78	356.41	7,857.09	1,202.44	1,208.53	111.14	2.12	MWD	EXTREME SURVEY			
7/25/2015	8,864.00	90.04	355.18	7,857.23	1,292.40	1,298.28	104.54	1.40	MWD	EXTREME SURVEY			
7/25/2015	8,953.00	90.40	355.18	7,856.89	1,381.33	1,386.97	97.07	0.40	MWD	EXTREME SURVEY			
7/25/2015	9,043.00	90.48	355.01	7,856.20	1,471.25	1,476.64	89.37	0.21	MWD	EXTREME SURVEY			
7/25/2015	9,132.00	88.90	355.18	7,856.68	1,560.17	1,565.31	81.76	1.79	MWD	EXTREME SURVEY			
7/25/2015	9,222.00	88.02	355.53	7,859.10	1,650.08	1,654.98	74.47	1.05	MWD	EXTREME SURVEY			
7/25/2015	9,311.00	89.96	356.41	7,860.66	1,739.03	1,743.74	68.22	2.39	MWD	EXTREME SURVEY			
7/25/2015	9,400.00	90.48	356.59	7,860.32	1,828.01	1,832.57	62.79	0.62	MWD	EXTREME SURVEY			
7/25/2015	9,490.00	88.20	355.36	7,861.36	1,917.97	1,922.33	56.47	2.88	MWD	EXTREME SURVEY			
7/25/2015	9,579.00	88.46	355.01	7,863.95	2,006.86	2,010.98	49.00	0.49	MWD	EXTREME SURVEY			
7/25/2015	9,668.00	88.20	352.54	7,866.55	2,095.63	2,099.41	39.36	2.79	MWD	EXTREME SURVEY			
7/25/2015	9,758.00	89.16	352.90	7,868.62	2,185.30	2,188.66	27.96	1.14	MWD	EXTREME SURVEY			
7/25/2015	9,847.00	90.40	352.90	7,868.96	2,274.01	2,276.98	16.96	1.39	MWD	EXTREME SURVEY			
7/25/2015	9,937.00	90.40	353.07	7,868.33	2,363.73	2,366.30	5.97	0.19	MWD	EXTREME SURVEY			
7/25/2015	10,026.00	90.40	352.19	7,867.71	2,452.41	2,454.56	-5.45	0.99	MWD	EXTREME SURVEY			
7/25/2015	10,115.00	91.45	353.07	7,866.28	2,541.08	2,542.81	-16.86	1.54	MWD	EXTREME SURVEY			
7/25/2015	10,205.00	90.66	352.37	7,864.62	2,630.76	2,632.07	-28.27	1.17	MWD	EXTREME SURVEY			
7/25/2015	10,294.00	89.52	350.96	7,864.48	2,719.30	2,720.13	-41.17	2.04	MWD	EXTREME SURVEY			
7/25/2015	10,384.00	89.34	351.49	7,865.37	2,808.76	2,809.07	-54.90	0.62	MWD	EXTREME SURVEY			
8/6/2015	10,473.00	89.43	352.54	7,866.33	2,897.35	2,897.20	-67.26	1.18	MWD	EXTREME SURVEY			
8/6/2015	10,562.00	89.25	353.77	7,867.35	2,986.09	2,985.56	-77.87	1.40	MWD	EXTREME SURVEY			
8/6/2015	10,652.00	89.60	354.13	7,868.26	3,075.91	3,075.05	-87.35	0.56	MWD	EXTREME SURVEY			
8/6/2015	10,741.00	89.43	356.76	7,869.01	3,164.85	3,163.76	-94.42	2.96	MWD	EXTREME SURVEY			
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Directional Survey

Well Name: TRANQUIL 13 STATE COM 2H

Sub-Division DELAWARE BASIN WEST		Region BASIN WEST		Field Name HAY HOLLOW NORTH				County EDDY		State/Province NM			
Surface Legal Location SEC13 T25S R27E		API/Well 3001541294		Latitude (") 32° 7' 24.954" N		Longitude (") 104° 8' 28.026" W		Orig KB Elevation (ft) 3,107.00		Ground Elev MSL (ft) 3,082.00		KB - GL (ft) 25.00	
Survey Data													
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company			
8/6/2015	10,830.00	89.87	358.17	7,869.55	3,253.84	3,252.67	-98.36	1.66	MWD	EXTREME SURVEY			
8/6/2015	10,928.00	91.45	358.35	7,868.43	3,351.82	3,350.62	-101.33	1.62	MWD	EXTREME SURVEY			
8/6/2015	11,009.00	93.03	358.70	7,865.26	3,432.74	3,431.52	-103.41	2.00	MWD	EXTREME SURVEY			
8/6/2015	11,099.00	93.30	358.52	7,860.29	3,522.59	3,521.36	-105.59	0.36	MWD	EXTREME SURVEY			
8/6/2015	11,188.00	91.89	357.29	7,856.26	3,611.49	3,610.21	-108.84	2.10	MWD	EXTREME SURVEY			
8/6/2015	11,278.00	91.36	357.11	7,853.71	3,701.45	3,700.06	-113.24	0.62	MWD	EXTREME SURVEY			
8/6/2015	11,367.00	88.99	354.65	7,853.44	3,790.41	3,788.82	-119.63	3.84	MWD	EXTREME SURVEY			
8/6/2015	11,456.00	89.08	354.65	7,854.94	3,879.29	3,877.42	-127.93	0.10	MWD	EXTREME SURVEY			
8/6/2015	11,545.00	89.69	355.36	7,855.89	3,968.20	3,966.07	-135.68	1.05	MWD	EXTREME SURVEY			
8/6/2015	11,635.00	90.04	356.06	7,856.10	4,058.15	4,055.82	-142.41	0.87	MWD	EXTREME SURVEY			
8/6/2015	11,724.00	89.69	355.36	7,856.31	4,147.11	4,144.57	-149.07	0.88	MWD	EXTREME SURVEY			
8/6/2015	11,814.00	90.22	355.01	7,856.38	4,237.04	4,234.25	-156.62	0.71	MWD	EXTREME SURVEY			
8/6/2015	11,903.00	89.52	354.48	7,856.59	4,325.94	4,322.88	-164.77	0.99	MWD	EXTREME SURVEY			
8/6/2015	11,992.00	89.43	354.30	7,857.40	4,414.80	4,411.45	-173.47	0.23	MWD	EXTREME SURVEY			
8/6/2015	12,082.00	90.04	354.65	7,857.82	4,504.68	4,501.03	-182.14	0.78	MWD	EXTREME SURVEY			
8/6/2015	12,172.00	89.87	355.01	7,857.89	4,594.58	4,590.66	-190.25	0.44	MWD	EXTREME SURVEY			
8/6/2015	12,240.00	89.87	355.01	7,858.04	4,662.52	4,658.40	-196.16	0.00	BIT	EXTREME SURVEY			

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