

30-025-42066

BC  PERATING, INC.

B.C Operating, Inc.

Lea County
Abe State 2H

MOJO EOW Survey

09 September, 2014

This survey is correct to the best of my knowledge and is supported
by actual field data.

_____(Signature)

Notarized this date _____ of _____, 2014

Notary Signature County of Collin State of Texas



MOJO
DIRECTIONAL CORPORATION

OCT 01 2014

Company:	B.C. Operating, Inc.	Level Control:	Well: Abe State #2H
Project:	Lea County	TM2:	WELL @ 3749.0usft (Original Well Elev)
Site:	Abe State 2H	TM3:	WELL @ 3749.0usft (Original Well Elev)
Well:	Abe State #2H	TM4:	Grid
Wellbore:	Abe State #2H	TM5:	Minimum Curvature
Design:	Abe State #2H	Database:	EDM 5000:1 Single User Db

Project:	Lea County		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:		Abe State 2H				
Site Position:		Northing:	525,308.87	usft	Latitude:	32° 26' 31.056 N
From:	Map	Easting:	769,903.47	usft	Longitude:	103° 35' 32.741 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16	"	Grid Convergence:	0.40 °

Well	Abe State #2H					
Well Position	+N/-S	0.0 usft	Northing:	525,741.95 usft	Latitude:	32° 26' 35.230 N
	+E/-W	0.0 usft	Easting:	771,523.46 usft	Longitude:	103° 35' 13.803 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,727.0 usft

Wellbore		Abe State #2H			
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2010	22/07/2014	7.23	60.31	48,434

Design:	Abe State #2H				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVI)	HGS	IS-W	Base	
	(usft)	(usft)	(usft)	(usft)	
	0.0	0.0	0.0	359.40	

Survey Program	Date	09/09/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
200.0	16,793.0	Survey #1 (Abe State #2H)		

COMPASS 5000.1 Build 56

Company:	B.C. Operating, Inc.	Local Coordinates Reference:	Well: Abe State #2H
Project:	Lea County	True Vertical Angle:	WELL @ 3749.0ust (Original Well Elev)
Site:	Abe State 2H	EDM (ft):	WELL @ 3749.0ust (Original Well Elev)
Well:	Abe State #2H	Work Interval:	Grid
Wellbore:	Abe State #2H	Survey Chain Length (ft):	Minimum Curvature
Design:	Abe State #2H	Comments:	EDM 5000.1 Single User Db

Survey												
ND (in ft)	Inc (°)	Asl (meters) (ft)	True (ft)	TYDSS (ust)	Inc (ust)	EDM (m)	EDM (ft)	Curvature (m)	Curvature (ft)	EDM (m)	EDM (ft)	EDM (ft)
2,400.0	0.84	170.34	2,399.6	-1,349.4	-41.6	2.0	-41.6	0.18	525,700.33	771,525.41		
2,500.0	1.02	153.85	2,498.6	-1,249.4	-43.1	2.5	-43.2	0.32	525,698.80	771,525.93		
2,600.0	0.98	152.85	2,598.6	-1,149.4	-44.7	3.3	-44.7	0.04	525,697.25	771,526.71		
2,700.0	1.13	145.67	2,698.5	-1,049.5	-46.3	4.2	-46.3	0.20	525,695.67	771,527.66		
2,800.0	1.57	125.07	2,798.5	-949.5	-47.9	5.9	-47.9	0.65	525,694.07	771,529.34		
2,900.0	2.06	119.93	2,898.5	-849.5	-49.6	8.6	-49.7	0.52	525,692.38	771,532.01		
3,000.0	2.87	112.73	2,998.4	-749.6	-51.4	12.4	-51.6	0.87	525,690.52	771,535.88		
3,100.0	3.08	108.63	3,098.2	-649.8	-53.3	17.3	-53.4	0.30	525,688.89	771,540.74		
3,200.0	3.42	105.96	3,198.1	-549.9	-54.9	22.7	-55.2	0.37	525,687.02	771,546.15		
3,300.0	3.69	102.69	3,298.9	-450.1	-56.5	28.7	-56.8	0.34	525,685.49	771,552.16		
3,400.0	3.77	102.21	3,398.7	-350.3	-57.9	35.0	-58.2	0.09	525,684.09	771,558.51		
3,500.0	3.96	103.37	3,498.4	-250.6	-59.4	41.6	-59.8	0.21	525,682.59	771,565.08		
3,600.0	3.51	102.31	3,598.2	-150.8	-60.8	48.0	-61.3	0.46	525,681.14	771,571.43		
3,700.0	3.21	101.76	3,698.1	-50.9	-62.0	53.7	-62.6	0.30	525,679.92	771,577.16		
3,800.0	3.21	100.71	3,797.9	48.9	-63.1	59.2	-63.7	0.06	525,678.83	771,582.66		
3,900.0	3.46	83.06	3,897.7	148.7	-63.3	64.9	-64.0	1.05	525,678.67	771,588.40		
4,000.0	3.55	73.52	3,997.5	248.5	-62.0	70.9	-62.8	0.59	525,679.92	771,594.37		
4,100.0	2.78	80.45	4,097.4	348.4	-60.8	76.3	-61.5	0.86	525,681.20	771,599.73		
4,200.0	1.11	80.99	4,197.3	448.3	-60.2	79.6	-61.0	1.87	525,681.75	771,603.07		
4,300.0	0.48	65.99	4,297.3	548.3	-59.9	81.0	-60.7	0.66	525,682.07	771,604.41		
4,400.0	0.50	62.24	4,397.3	648.3	-59.5	81.7	-60.4	0.04	525,682.45	771,605.18		
4,500.0	0.54	42.81	4,497.3	748.3	-59.0	82.4	-59.8	0.18	525,682.99	771,605.89		
4,600.0	0.53	39.38	4,597.3	848.3	-58.3	83.0	-59.1	0.03	525,683.70	771,606.50		
4,700.0	0.49	33.17	4,697.3	948.3	-57.5	83.6	-58.4	0.07	525,684.41	771,607.03		
4,800.0	0.41	30.31	4,797.3	1,048.3	-56.9	84.0	-57.7	0.08	525,685.08	771,607.44		
4,900.0	0.33	13.17	4,897.3	1,148.3	-56.3	84.2	-57.2	0.14	525,685.67	771,607.69		
5,000.0	0.22	323.33	4,997.3	1,248.3	-55.8	84.2	-56.7	0.25	525,686.10	771,607.64		

Company:	B.C. Operating, Inc.	Location:	Well Abe State #2H
Project:	Lea County	Type:	WELL @ 3749.0ust (Original Well Elev)
Site:	Abe State 2H	MO Number:	WELL @ 3749.0ust (Original Well Elev)
Well:	Abe State #2H	Notes:	Grid
Wellbore:	Abe State #2H	Survey:	Minimum Curvature
Design:	Abe State #2H	Software:	EDM 5000.1 Single User Db

MD (ust)	Inc (°)	Alt (feet/m)	TVD (feet)	TVDS (ust)	MS (ust)	FW (ust)	FW (ust)	FW (ust)	FW (ust)	FW (ust)	FW (ust)	FW (ust)
5,100.0	0.22	289.70	5,097.3	1,348.3	-55.6	83.9	-56.5	0.13	525,686.32	771,607.35		
5,156.0	0.21	284.59	5,153.3	1,404.3	-55.6	83.7	-56.4	0.04	525,686.39	771,607.14		
9 5/8"												
5,200.0	0.21	280.39	5,197.3	1,448.3	-55.5	83.5	-56.4	0.04	525,686.42	771,606.99		
5,217.0	0.20	282.14	5,214.3	1,465.3	-55.5	83.5	-56.4	0.07	525,686.43	771,606.93		
Bell Canyon												
5,300.0	0.15	294.15	5,297.3	1,548.3	-55.4	83.2	-56.3	0.07	525,686.51	771,606.69		
5,400.0	0.21	276.64	5,397.3	1,648.3	-55.4	82.9	-56.2	0.08	525,686.58	771,606.38		
5,500.0	0.24	256.87	5,497.3	1,748.3	-55.4	82.5	-56.3	0.08	525,686.56	771,606.00		
5,600.0	0.11	290.87	5,597.3	1,848.3	-55.4	82.2	-56.3	0.16	525,686.54	771,605.70		
5,700.0	0.11	281.10	5,697.3	1,948.3	-55.4	82.1	-56.2	0.02	525,686.59	771,605.52		
5,800.0	0.16	238.45	5,797.3	2,048.3	-55.4	81.8	-56.3	0.11	525,686.54	771,605.31		
5,900.0	0.26	222.24	5,897.3	2,148.3	-55.7	81.6	-56.5	0.12	525,686.30	771,605.04		
6,000.0	0.24	228.13	5,997.3	2,248.3	-56.0	81.3	-56.8	0.03	525,685.99	771,604.73		
6,100.0	0.38	245.22	6,097.3	2,348.3	-56.2	80.8	-57.1	0.17	525,685.71	771,604.27		
6,134.0	0.40	243.78	6,131.3	2,382.3	-56.3	80.6	-57.2	0.06	525,685.61	771,604.06		
Cherry Canyon												
6,200.0	0.43	241.31	6,197.3	2,448.3	-56.6	80.2	-57.4	0.06	525,685.39	771,603.64		
6,300.0	0.31	254.66	6,297.3	2,548.3	-56.8	79.6	-57.6	0.15	525,685.14	771,603.05		
6,400.0	0.32	258.22	6,397.3	2,648.3	-56.9	79.1	-57.8	0.02	525,685.01	771,602.52		
6,500.0	0.27	247.55	6,497.3	2,748.3	-57.1	78.6	-57.9	0.07	525,684.87	771,602.02		
6,600.0	0.29	263.14	6,597.3	2,848.3	-57.2	78.1	-58.0	0.08	525,684.75	771,601.56		
6,700.0	0.39	270.82	6,697.3	2,948.3	-57.2	77.5	-58.0	0.11	525,684.72	771,600.96		
6,800.0	0.24	276.16	6,797.3	3,048.3	-57.2	77.0	-58.0	0.15	525,684.75	771,600.42		
6,900.0	0.25	276.58	6,897.3	3,148.3	-57.2	76.5	-58.0	0.01	525,684.80	771,599.99		
7,000.0	0.51	246.63	6,997.3	3,248.3	-57.3	75.9	-58.1	0.32	525,684.64	771,599.37		
7,100.0	0.61	246.28	7,097.3	3,348.3	-57.7	75.0	-58.5	0.10	525,684.25	771,598.47		

COMPASS 5000.1 Build 56

Company:	B.C. Operating, Inc.	Local Grid (North Reference):	Well: Abe State #2H
Project:	Lea County	IVT Method:	WELL @ 3749.0ust (Original Well Elev)
Site:	Abe State 2H	3rd Reference:	WELL @ 3749.0ust (Original Well Elev)
Well:	Abe State #2H	North Reference:	Grid:
Wellbore:	Abe State #2H	Survey Calculation Method:	Minimum Curvature
Design:	Abe State #2H	Database:	EDM 5000.1 Single User Db

Survey												
MD (ust)	Inc (°)	Azi (azimuth) (°)	NEO (ust)	TVDSO (ust)	MS (ust)	SDP (ust)	Y-Flag (ust)	Curvature (1/ust)	Well	Well	Well	Well
9,500.0	1.23	299.12	9,496.8	5,747.8	-67.9	37.1	-68.3	0.51	525,674.04	771,560.54		
9,600.0	1.27	300.09	9,596.8	5,847.8	-66.8	35.2	-67.2	0.05	525,675.12	771,558.65		
9,700.0	1.87	304.82	9,696.8	5,947.8	-65.3	32.9	-65.7	0.61	525,676.60	771,556.35		
9,800.0	1.12	296.70	9,796.7	6,047.7	-64.0	30.7	-64.3	0.78	525,677.97	771,554.14		
9,900.0	1.88	287.76	9,896.7	6,147.7	-63.0	28.2	-63.3	0.79	525,678.91	771,551.70		
10,000.0	1.80	289.95	9,996.7	6,247.7	-62.0	25.2	-62.3	0.11	525,679.95	771,548.66		
10,100.0	1.75	288.39	10,096.6	6,347.6	-61.0	22.3	-61.2	0.07	525,680.97	771,545.74		
10,200.0	1.63	290.97	10,196.6	6,447.6	-60.0	19.5	-60.2	0.14	525,681.96	771,542.96		
10,227.0	1.64	290.56	10,223.6	6,474.6	-59.7	18.8	-59.9	0.07	525,682.23	771,542.24		
1st Bone Springs Sand												
10,300.0	1.68	289.48	10,296.5	6,547.5	-59.0	16.8	-59.2	0.07	525,682.96	771,540.25		
10,400.0	1.38	284.07	10,396.5	6,647.5	-58.2	14.2	-58.4	0.33	525,683.74	771,537.70		
10,500.0	0.88	276.00	10,496.5	6,747.5	-57.8	12.3	-58.0	0.52	525,684.11	771,535.77		
10,600.0	0.87	203.55	10,596.5	6,847.5	-58.5	11.2	-58.6	1.03	525,683.49	771,534.70		
10,700.0	1.26	186.33	10,696.4	6,947.4	-60.2	10.8	-60.4	0.50	525,681.71	771,534.28		
10,800.0	1.48	176.53	10,796.4	7,047.4	-62.6	10.8	-62.7	0.32	525,679.32	771,534.23		
10,900.0	1.75	177.60	10,896.4	7,147.4	-65.4	10.9	-65.6	0.27	525,676.51	771,534.38		
11,000.0	1.97	183.58	10,996.3	7,247.3	-68.7	10.9	-68.8	0.29	525,673.27	771,534.33		
11,088.0	1.77	186.58	11,084.3	7,335.3	-71.5	10.6	-71.6	0.26	525,670.41	771,534.08		
2nd Bone Springs Sand												
11,100.0	1.74	187.04	11,096.3	7,347.3	-71.9	10.6	-72.0	0.26	525,670.05	771,534.04		
11,200.0	1.58	201.96	11,196.2	7,447.2	-74.7	9.9	-74.8	0.46	525,667.26	771,533.34		
11,300.0	0.97	249.46	11,296.2	7,547.2	-76.3	8.6	-76.4	1.17	525,665.68	771,532.03		
11,400.0	1.21	255.13	11,396.2	7,647.2	-76.8	6.8	-76.9	0.26	525,665.12	771,530.22		
11,478.0	4.00	0.80	11,474.1	7,725.1	-74.3	6.0	-74.4	5.74	525,667.63	771,529.46		
11,494.0	5.00	12.50	11,490.1	7,741.1	-73.1	6.2	-73.1	8.45	525,668.87	771,529.62		
11,558.0	2.80	16.90	11,553.9	7,804.9	-68.9	7.2	-68.9	3.47	525,673.08	771,530.68		

Company: B.C. Operating, Inc Project: Lea County Site: Abe State 2H Well: Abe State #2H Wellbore: Abe State #2H Design: Abe State #2H				Local Coordinate Reference: TYD Reference: MD Reference: North Arrow: Survey Control Method: Tieback:				Well Abe State #2H WELL @ 3749.0ust (Original Well Elev) WELL @ 3749.0ust (Original Well Elev) Grid Minimum Curvature EDM 5000.1 Single User Do			
Survey											
MD (ust)	Inc (°)	Azi (azimuth) (°)		TYD (ust)	TYDSS (ust)	MD (ust)	EDM (ust)	Y-Coord (ust)	X-Coord (ust)	WELL (ust)	WELL (ust)
11,621.0	7.40	5.20	11,616.6	7,867.6	-63.3	8.0	-63.4	7.45	525,878.60	771,531.49	
11,653.0	11.50	5.80	11,648.2	7,899.2	-58.1	8.5	-58.2	12.82	525,683.83	771,532.00	
11,683.0	15.70	4.70	11,677.4	7,928.4	-51.1	9.2	-51.2	14.03	525,690.85	771,532.64	
11,715.0	20.00	2.30	11,707.8	7,958.8	-41.3	9.7	-41.4	13.63	525,700.64	771,533.21	
11,747.0	24.20	359.00	11,737.5	7,988.5	-29.3	9.9	-29.4	13.68	525,712.67	771,533.32	
11,791.0	31.80	354.90	11,776.3	8,027.3	-8.7	8.7	-8.8	17.81	525,733.27	771,532.13	
11,806.0	34.50	354.00	11,788.8	8,039.8	-0.5	7.9	-0.6	18.30	525,741.43	771,531.33	
11,842.0	39.90	353.80	11,817.5	8,068.5	21.1	5.6	21.1	15.00	525,763.06	771,529.02	
11,874.0	44.40	354.60	11,841.2	8,092.2	42.5	3.4	42.4	14.16	525,784.42	771,526.85	
11,906.0	48.50	355.00	11,863.3	8,114.3	65.6	1.3	65.5	12.84	525,807.52	771,524.75	
11,938.0	52.20	356.20	11,883.7	8,134.7	90.1	-0.6	90.1	11.92	525,832.08	771,522.87	
12,003.0	60.41	356.77	11,919.7	8,170.7	144.1	-3.9	144.1	12.65	525,886.03	771,519.57	
Cross South Hard Boundary at 12003RMD											
12,033.0	64.20	357.00	11,933.6	8,184.6	170.6	-5.3	170.6	12.65	525,912.53	771,518.13	
12,128.0	74.90	356.30	11,966.8	8,217.8	259.3	-10.5	259.4	11.28	526,001.26	771,512.91	
12,186.0	82.80	355.70	11,978.0	8,229.0	316.0	-14.5	316.2	13.66	526,057.98	771,508.94	
12,217.0	87.50	354.50	11,980.6	8,231.6	346.8	-17.2	347.0	15.64	526,088.75	771,506.31	
12,256.0	91.40	356.70	11,981.0	8,232.0	385.7	-20.1	385.9	11.48	526,127.62	771,503.31	
12,288.0	92.00	357.30	11,980.0	8,231.0	417.6	-21.8	417.8	2.65	526,159.56	771,501.64	
12,320.0	92.40	356.90	11,978.8	8,229.8	449.5	-23.4	449.8	1.77	526,191.50	771,500.02	
12,415.0	93.30	358.70	11,974.1	8,225.1	544.4	-27.1	544.6	2.12	526,286.30	771,496.38	
12,511.0	93.10	359.90	11,968.7	8,219.7	640.2	-28.3	640.5	1.27	526,382.15	771,495.21	
12,606.0	93.20	359.80	11,963.5	8,214.5	735.1	-28.5	735.3	0.15	526,477.00	771,494.96	
12,701.0	92.70	1.60	11,958.6	8,209.6	829.9	-27.3	830.2	1.96	526,571.86	771,496.12	
12,797.0	93.10	1.90	11,953.8	8,204.8	925.7	-24.4	925.9	0.52	526,667.70	771,499.05	
12,892.0	93.90	1.60	11,948.0	8,199.0	1,020.5	-21.5	1,020.7	0.90	526,762.47	771,501.94	
12,988.0	92.90	2.30	11,942.3	8,193.3	1,116.3	-18.3	1,116.4	1.27	526,858.25	771,505.21	

Company:	B.C. Operating, Inc.	Local Data Source Reference:	Well: Abe State #2H
Project:	Lea County	Station Number:	WELL @ 3749.0ust (Original Well Elev)
Site:	Abe State 2H	MD (feet):	WELL @ 3749.0ust (Original Well Elev)
Well:	Abe State #2H	Well Name:	Grid
Wellbore:	Abe State #2H	Survey Collection Method:	Minimum Curvature
Design:	Abe State #2H	Drawn by:	EDM 5000.1 Single User Db

Survey												
MD (feet)	Inc °	Asi (azimuth) °	TVD (feet)	TVDSS (feet)	SLS (feet)	EDM (feet)	Y. Slo feet	Y. Slo feet	Y. Slo feet	Y. Slo feet	Y. Slo feet	Y. Slo feet
13,084.0	92.60	0.70	11,937.7	8,188.7	1,212.1	-15.7	1,212.2	1.69	526,954.10	771,507.72		
13,179.0	90.90	359.80	11,934.8	8,185.8	1,307.1	-15.3	1,307.2	2.02	527,049.05	771,508.13		
13,274.0	91.80	359.30	11,932.5	8,183.5	1,402.1	-16.1	1,402.2	1.08	527,144.02	771,507.38		
13,369.0	89.90	359.50	11,931.1	8,182.1	1,497.0	-17.1	1,497.1	2.01	527,239.00	771,506.39		
13,464.0	90.30	359.20	11,931.0	8,182.0	1,592.0	-18.1	1,592.1	0.53	527,333.99	771,505.31		
13,559.0	91.20	359.60	11,929.7	8,180.7	1,687.1	-19.1	1,687.2	1.04	527,429.00	771,504.32		
13,654.0	90.20	0.50	11,928.5	8,179.5	1,782.0	-19.1	1,782.1	1.42	527,523.97	771,504.40		
13,749.0	91.70	0.70	11,927.0	8,178.0	1,877.0	-18.1	1,877.1	1.59	527,618.95	771,505.39		
13,844.0	90.80	0.30	11,924.9	8,175.9	1,972.0	-17.2	1,972.0	1.04	527,713.92	771,506.22		
13,940.0	91.50	359.00	11,923.0	8,174.0	2,067.9	-17.8	2,068.0	1.54	527,809.90	771,505.64		
14,035.0	88.90	358.00	11,922.6	8,173.6	2,162.9	-20.3	2,163.0	2.93	527,904.85	771,503.15		
14,131.0	89.70	358.10	11,923.8	8,174.8	2,258.8	-23.6	2,259.0	0.84	528,000.79	771,499.88		
14,227.0	88.90	358.60	11,925.0	8,176.0	2,354.8	-26.3	2,354.9	0.98	528,096.74	771,497.12		
14,322.0	89.70	358.30	11,926.2	8,177.2	2,449.7	-28.9	2,449.9	0.90	528,191.70	771,494.55		
14,418.0	91.30	358.20	11,925.3	8,176.3	2,545.7	-31.8	2,545.9	1.67	528,287.65	771,491.62		
14,513.0	90.90	0.60	11,923.5	8,174.5	2,640.7	-32.8	2,640.9	2.56	528,382.62	771,490.62		
14,608.0	91.30	0.80	11,921.7	8,172.7	2,735.6	-31.7	2,735.8	0.47	528,477.59	771,491.78		
14,754.0	90.80	0.90	11,919.0	8,170.0	2,881.6	-29.5	2,881.8	0.35	528,623.55	771,493.95		
14,800.0	91.70	0.30	11,918.0	8,169.0	2,927.6	-29.0	2,927.7	2.35	528,669.54	771,494.43		
14,895.0	91.90	0.80	11,915.0	8,166.0	3,022.5	-28.1	3,022.7	0.57	528,764.48	771,495.34		
14,991.0	93.10	359.50	11,910.8	8,161.8	3,118.4	-27.9	3,118.6	1.84	528,860.39	771,495.59		
15,087.0	92.00	359.90	11,906.5	8,157.5	3,214.3	-28.4	3,214.5	1.22	528,956.29	771,495.09		
15,182.0	91.80	0.00	11,903.4	8,154.4	3,309.3	-28.5	3,309.4	0.24	529,051.24	771,495.01		
15,278.0	90.60	359.50	11,901.4	8,152.4	3,405.3	-28.9	3,405.4	1.35	529,147.21	771,494.59		
15,373.0	90.50	358.70	11,900.5	8,151.5	3,500.2	-30.4	3,500.4	0.85	529,242.20	771,493.10		
15,468.0	91.10	359.50	11,899.1	8,150.1	3,595.2	-31.9	3,595.4	1.05	529,337.17	771,491.61		
15,564.0	91.40	359.00	11,897.1	8,148.1	3,691.2	-33.1	3,691.3	0.61	529,433.14	771,490.35		

Company:	B.C. Operating, Inc.	Local / Global Reference:	Well Abe State #2H
Project:	Lea County	TVD Reference:	WELL @ 3749.0ust (Original Well Elev)
Site:	Abe State 2H	MD Reference:	WELL @ 3749.0ust (Original Well Elev)
Well:	Abe State #2H	North Reference:	Grid
Wellbore:	Abe State #2H	Survey / Calculation Method:	Minimum Curvature
Design:	Abe State #2H	Database:	EDM 5000.1 Single User Db

MD (ust)	Inc (°)	Asi (azimuth) (°)	TVD (ust)	TVD24 (ust)	Inc (ust)	GRN (ft/s)	GRN (ust)	GRN (ust)	GRN (ust)	GRN (ust)	GRN (ust)
15,660.0	92.20	358.50	11,894.0	8,145.0	3,787.1	-35.2	3,787.3	0.98	529,529.07	771,488.26	
15,755.0	92.20	359.40	11,890.4	8,141.4	3,882.0	-36.9	3,882.2	0.95	529,623.98	771,486.52	
15,850.0	92.60	358.00	11,886.4	8,137.4	3,976.9	-39.1	3,977.1	1.53	529,718.87	771,484.36	
15,945.0	91.80	358.70	11,882.8	8,133.8	4,071.8	-41.8	4,072.0	1.12	529,813.76	771,481.63	
16,041.0	91.60	358.80	11,879.9	8,130.9	4,167.7	-43.9	4,168.0	0.23	529,909.70	771,479.54	
16,137.0	91.20	359.10	11,877.6	8,128.6	4,263.7	-45.7	4,263.9	0.52	530,005.65	771,477.78	
16,232.0	90.10	0.10	11,876.5	8,127.5	4,358.7	-46.3	4,358.9	1.56	530,100.64	771,477.12	
16,327.0	91.20	359.50	11,875.4	8,126.4	4,453.7	-46.7	4,453.9	1.32	530,195.63	771,476.78	
16,423.0	92.00	358.40	11,872.7	8,123.7	4,549.6	-48.4	4,549.9	1.42	530,291.57	771,475.03	
16,518.0	93.70	357.60	11,868.0	8,119.0	4,644.4	-51.7	4,644.7	1.98	530,386.40	771,471.72	
16,614.0	93.20	357.00	11,862.2	8,113.2	4,740.2	-56.3	4,740.5	0.81	530,482.11	771,467.20	
16,636.0	93.57	356.70	11,860.9	8,111.9	4,762.1	-57.5	4,762.5	2.17	530,504.08	771,465.99	
Cross North Hard Boundary at 16636ftMD											
16,709.0	94.80	355.70	11,855.6	8,106.6	4,834.7	-62.3	4,835.1	2.17	530,576.68	771,461.17	
16,743.0	95.30	355.90	11,852.6	8,103.6	4,868.5	-64.8	4,868.9	1.58	530,610.46	771,458.69	
16,782.0	95.30	355.90	11,849.0	8,100.0	4,907.3	-67.5	4,907.7	0.00	530,649.23	771,455.91	
5 1/2"											
16,793.0	95.30	355.90	11,848.0	8,099.0	4,918.2	-68.3	4,918.6	0.00	530,660.15	771,455.13	
TD@ 16793ftMD/ 11848ft TVD											

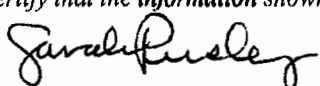
Casing Points				Casing Diameter		Pipe Diameter	
Measured Depth (ust)	Vertical Depth (ust)	Name		11	13	16	
1,710.0	1,709.7	13 3/8"		13-3/8		16	
5,156.0	5,153.3	9 5/8"		9-5/8		12-1/4	
16,782.0	11,849.0	5 1/2"		5-1/2		8-1/2	

Company:	B.C Operating, Inc.	Location:	Well: Abe State #2H
Project:	Lea County	TVD:	WELL @ 3749.0ust (Original Well Elev)
Site:	Abe State 2H	MD:	WELL @ 3749.0ust (Original Well Elev)
Well:	Abe State #2H	Depth:	Grid
Wellbore:	Abe State #2H	Survey:	Minimum Curvature
Design:	Abe State #2H	Database:	EDM 5000.1 Single User Db

Formations				
Measured Depth (ust)	Vertical Depth (ust)	Name	Dip (°)	
10,227.0	10,223.6	1st Bone Springs Sand	0.00	
6,134.0	6,131.3	Cherry Canyon	0.00	
1,302.0	1,301.8	Rustler	0.00	
5,217.0	5,214.3	Bell Canyon	0.00	
9,268.0	9,264.9	Avalon Shale	0.00	
11,088.0	11,084.3	2nd Bone Springs Sand	0.00	
7,514.0	7,511.2	Brushy Canyon	0.00	

Survey Annotations				
Measured Depth (ust)	Vertical Depth (ust)	Local Coordinates		Comments
		+N-S (ust)	+E-W (ust)	
12,003.0	11,919.7	144.1	-3.9	Cross South Hard Boundary at 12003ftMD
16,636.0	11,860.9	4,762.1	-57.5	Cross North Hard Boundary at 16636ftMD
16,793.0	11,848.0	4,918.2	-68.3	TD@ 16793ftMD/ 11848ft TVD

Checked By: _____ Approved By: _____ Date: _____

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 Revised August 1, 2011								
		1. WELL API NO. 30-025-35052								
		2. Type of Lease ☐ STATE ☒ FEE ☐ FED/INDIAN								
		3. State Oil & Gas Lease No.								
WELL COMPLETION OR RECOMPLETION REPORT AND LOG										
4. Reason for filing: ☒ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)		5. Lease Name or Unit Agreement Name HULDA								
		6. Well Number: 1								
7. Type of Completion: ☐ NEW WELL ☒ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☒ DIFFERENT RESERVOIR ☐ OTHER										
8. Name of Operator NADEL AND GUSSMAN PERMIAN, L.L.C.		9. OGRID 155615								
10. Address of Operator 601 N. MARIENFELD, SUITE 508 MIDLAND, TX 79701		11. Pool name or Wildcat TOWNSEND; STRAWN								
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	V	4	16S	35E		760	S	1980	W	LEA
BH:										
13. Date Spudded 6/16/2000	14. Date T.D. Reached	15. Date Rig Released		16. Date Completed (Ready to Produce) 5/2/2015			17. Elevations (DF and RKB, RT, GR, etc.) 4,023' GL			
18. Total Measured Depth of Well 12,218'		19. Plug Back Measured Depth 11,910'		20. Was Directional Survey Made?			21. Type Electric and Other Logs Run			
22. Producing Interval(s), of this completion - Top, Bottom, Name 11,334' - 11,430', STRAWN										
23. CASING RECORD (Report all strings set in well)										
CASING SIZE	WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED	
13.375"	48#, H-40		420'		17.5"		415 SX, CIRC			
8.625"	32#, J-55		4,500'		12.25"		1,828 SX, CIRC			
5.5"	17#, N-80 & P-110		12,218'		7.875"		1,192 SX, TOC @6,850 by CBL			
24. LINER RECORD						25. TUBING RECORD				
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET			
					2-7/8"	11,546'				
26. Perforation record (interval, size, and number) 11,334' - 11,430'; 3 SPF, 0.42" HOLES, 108 SHOTS						27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 11,334' - 11,430' 12 BBLS ACID				
28. PRODUCTION										
Date First Production 5/2/2015		Production Method (Flowing, gas lift, pumping - Size and type pump) PUMPING, 1.25"					Well Status (Prod. or Shut-in) PRODUCING			
Date of Test 5/7/2015	Hours Tested 24	Choke Size	Prod'n For Test Period	Oil - Bbl 8	Gas - MCF 10	Water - Bbl. 19	Gas - Oil Ratio 1,250			
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)				
29. Disposition of Gas (Sold, used for fuel, vented, etc.) SOLD							30. Test Witnessed By			
31. List Attachments										
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.										
33. If an on-site burial was used at the well, report the exact location of the on-site burial:										
Latitude			Longitude			NAD 1927 1983				
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief										
Signature 			Printed Name SARAH PRESLEY		Title REGULATORY ANALYST		Date 7.22.2015			
E-mail Address spresley@naguss.com										

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	T. Menefee	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres	T. Simpson	T. Mancos	T. McCracken
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T. Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T. Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....

No. 3, from.....to.....

No. 2, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet.....

No. 2, from to feet.....

No. 3, from to feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology

From	To	Thickness In Feet	Lithology