

District I
1625 N. French Dr. Hobbs NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6174 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources

RECEIVED

Form C-101
Revised July 18, 2013

Oil Conservation Division

JUN 13 2019

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505 DISTRICT II-ARTESIA O.C.D.

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address Mack Energy Corporation P.O. Box 960, Artesia, NM 88211-0960		OGRID Number 013837	
Property Code 318349		API Number 30-005-64296	
Property Name Medicine Hat State Com		Well No. 2H	

Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
C	35	15S	28E		500	North	2285	West	Chaves, NM

Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
N	35	15S	28E	1		South	2285	West	Chaves, NM

Pool Information

Pool Name Round Tank; San Andres	Pool Code 52770
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Additional Well Information

Work Type Re-Entry	Well Type Oil	Cable/Rotary	Lease Type State	Ground Level Elevation 3577.4'
Multiple NO	Proposed Depth 7342'	Formation San Andres	Contractor	Spud Date 7/1/2019
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
J-55	17 1/2	13 3/8" (Existing)	48#	450'	500sx	0
HCP-110	8 3/4"	7"	26#	3350'	350sx	0
HCP-110	8 3/4"	5 1/2"	17#	7342'	1300sx	0

Casing/Cement Program: Additional Comments

Drill 8 3/4" hole to 7342', run 7" csg/cmt 0-3350, run 5 1/2" csg/cmt 3350-7342'. Put well on production.

Proposed Blowout Prevention Program

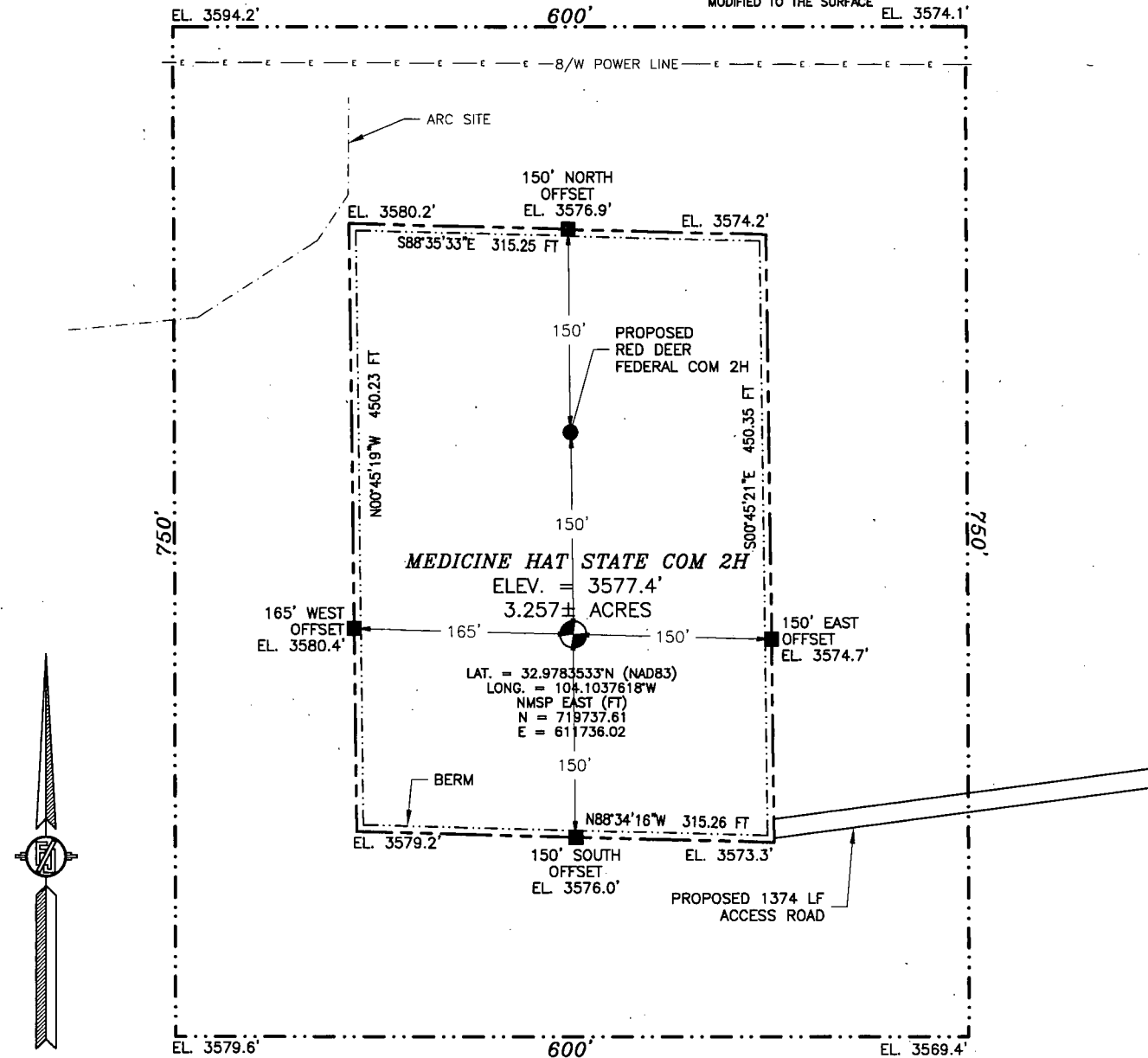
Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☐ if applicable. Signature: <i>Deana Weaver</i>		OIL CONSERVATION DIVISION	
Printed name Deana Weaver		Approved By: <i>Raymond W. Sedberry</i>	
Title Production Clerk		Title <i>Geologist</i>	
E-mail Address dweaver@mec.com		Approved Date: <i>6-24-19</i> Expiration Date: <i>6-24-21</i>	
Date: <i>6.12.19</i>	Phone 575-748-1288	Conditions of Approval Attached	

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 28 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

SITE MAP

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE



012 60 120 240

SCALE 1" = 120'

DIRECTIONS TO LOCATION

FROM INTERSECTION OF STATE HIGHWAY 82 AND CR 209 (TURKEY TRACK) GO NORTH ON CR 209 FOR APPROX. 5.0 MILES TO END OF CR MAINTENANCE, CONTINUE NORTH ON TURKEY TRACK ROAD FOR APPROX. 6.5 MILES, CONTINUE NORTHEAST ON 15' CALICHE LEASE ROAD FOR APPROX. 2500' TO SYDNEY STATE 1H PAD. CONTINUE NORTHWEST ON 15' CALICHE LEASE ROAD FOR APPROX. 0.1 OF A MILE TO BEGIN ROAD SURVEY, FOLLOW ROAD SURVEY WEST APPROX. 1374' TO SOUTHEAST PAD CORNER FOR THIS LOCATION.

MACK ENERGY CORPORATION
MEDICINE HAT STATE COM 2H
LOCATED 500 FT. FROM THE NORTH LINE
AND 2285 FT. FROM THE WEST LINE OF
SECTION 35, TOWNSHIP 15 SOUTH,
RANGE 28 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

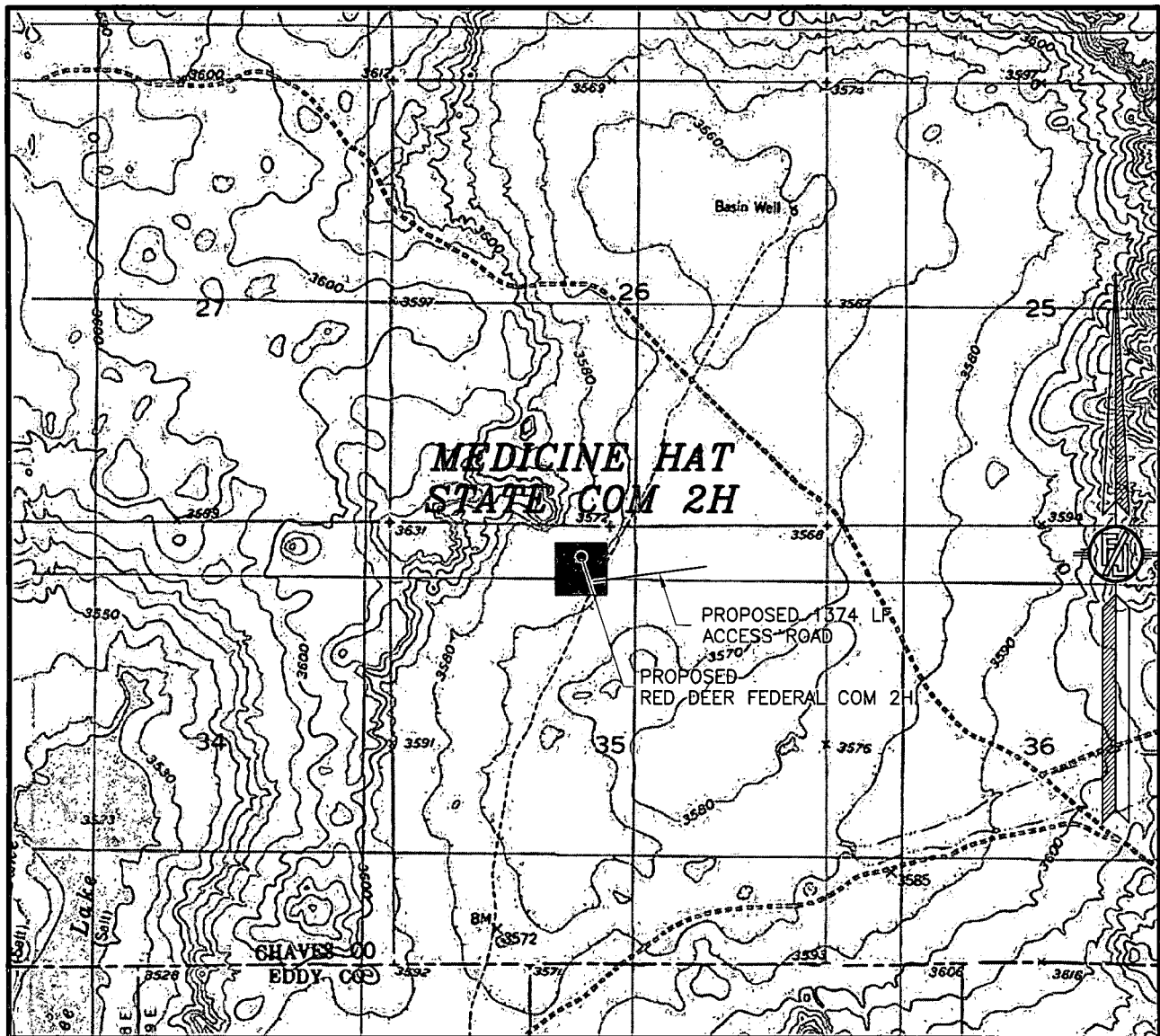
JUNE 3, 2019

SURVEY NO. 5308A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 28 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS/4UAD MAP:
BASIN WELL

NOT TO SCALE

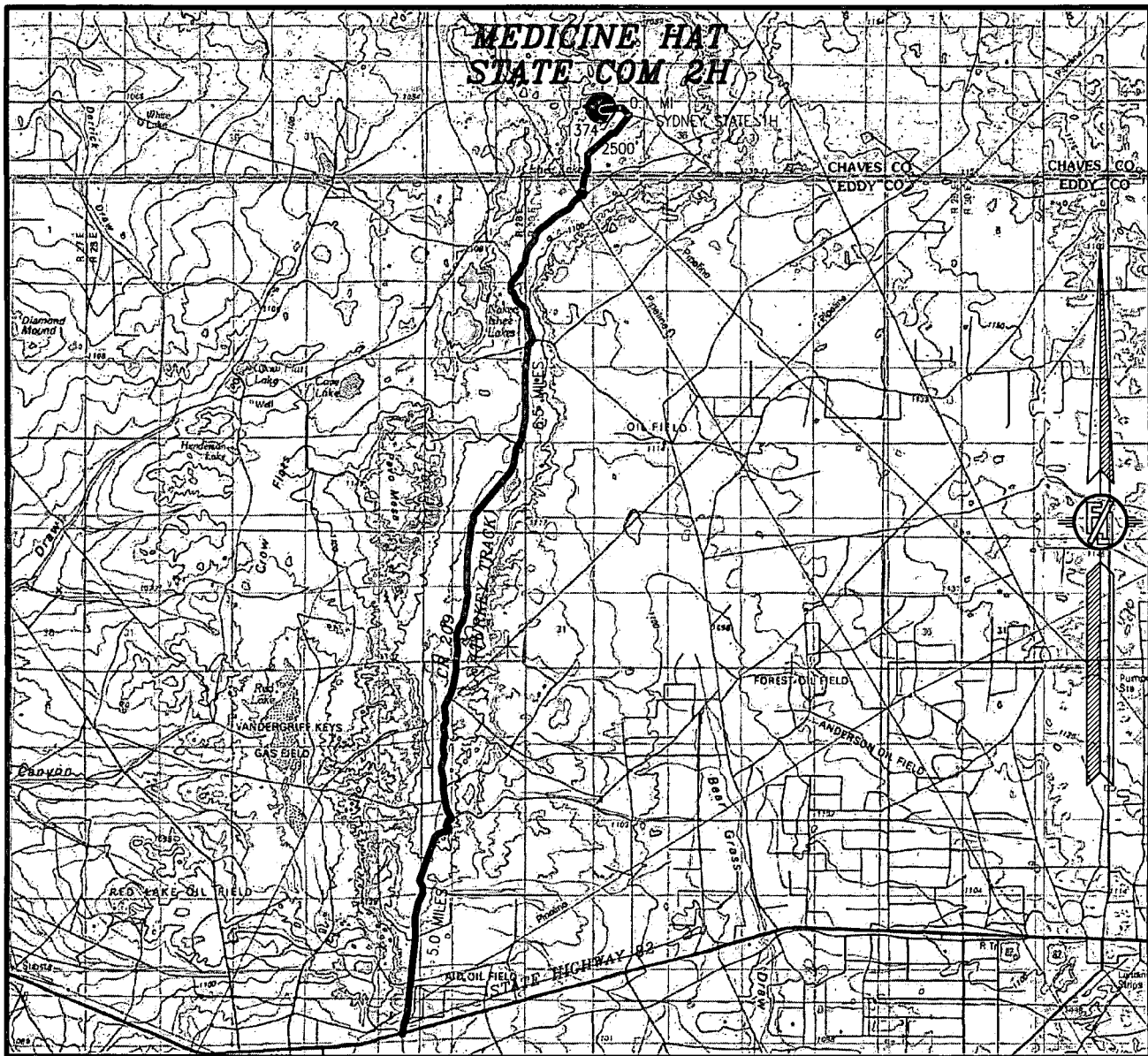
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CHAVES COUNTY, STATE OF NEW MEXICO

JUNE 3, 2019

SURVEY NO. 5308A

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 28 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM INTERSECTION OF STATE HIGHWAY 82 AND CR 209 (TURKEY TRACK) GO NORTH ON CR 209 FOR APPROX. 5.0 MILES TO END OF CR MAINTENANCE, CONTINUE NORTH ON TURKEY TRACK ROAD FOR APPROX. 6.5 MILES, CONTINUE NORTHEAST ON 15' CALICHE LEASE ROAD FOR APPROX. 2500' TO SYDNEY STATE 1H PAD. CONTINUE NORTHWEST ON 15' CALICHE LEASE ROAD FOR APPROX. 0.1 OF A MILE TO BEGIN ROAD SURVEY, FOLLOW ROAD SURVEY WEST APPROX. 1374' TO SOUTHEAST PAD CORNER FOR THIS LOCATION.

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JUNE 3, 2019

SURVEY NO. 5308A

MADRON SURVEYING, INC. 301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 28 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
FEBRUARY 2017

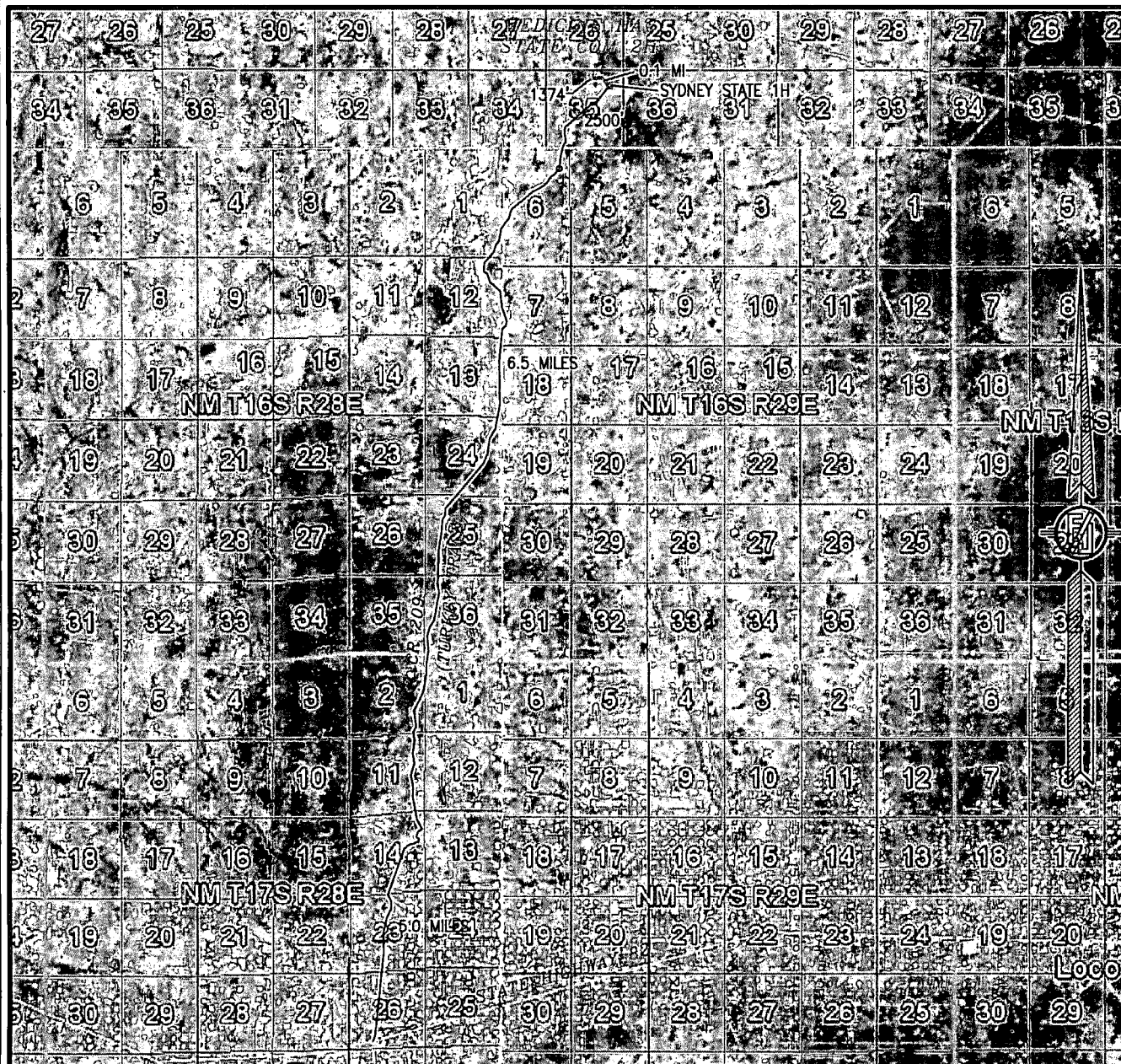
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CHAVES COUNTY, STATE OF NEW MEXICO

JUNE 3, 2019

SURVEY NO. 5308A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 28 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
ACCESS AERIAL ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
FEBRUARY 2017

MACK ENERGY CORPORATION
MEDICINE HAT STATE COM 2H
LOCATED 500 FT. FROM THE NORTH LINE
AND 2285 FT. FROM THE WEST LINE OF
SECTION 35, TOWNSHIP 15 SOUTH,
RANGE 28 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

JUNE 3, 2019

SURVEY NO. 5308A

MADRON SURVEYING, INC. 301- SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341

Medicine Hat State Com #2H, Plan 1

Operator Mack Energy Corp	Units feet, °/100ft	15:41 Tuesday, June 11, 2019 Page 1 of 4
Field Round Tank	County Chaves	Vertical Section Azimuth 179.17
Well Name Medicine Hat State Com #2H	State New Mexico	Survey Calculation Method Minimum Curvature
Plan 1	Country USA	Database Access

Location SL: 500 FNL & 2285 FWL Sec 35-T15S-R28E BHL: 1 FSL & 2285 FWL Sec 35-T15S-R28E	Map Zone UTM	Lat Long Ref
Site	Surface X 1915335.1	Surface Long
Slot Name	Surface Y 11971926.5	Surface Lat
Well Number	Surface Z	Global Z Ref Mean Sea Level
Project	Ground Level 3577.4	Local North Ref Grid
UWI		
API		
MD/TVD Ref 3590.4		

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
*** TIE (at MD = 2098.00)										
2098.00	0.00	0.0	2098.00	0.00	0.00		0.00	1915335.10	11971926.50	
2100.00	0.00	0.0	2100.00	0.00	0.00	0.00	0.00	1915335.10	11971926.50	
2150.00	0.00	0.0	2150.00	0.00	0.00	0.00	0.00	1915335.10	11971926.50	
*** KOP 8 DEGREES (at MD = 2198.00)										
2198.00	0.00	0.0	2198.00	0.00	0.00	0.00	0.00	1915335.10	11971926.50	
2200.00	0.16	179.2	2200.00	0.00	0.00	8.00	0.00	1915335.10	11971926.50	
2250.00	4.16	179.2	2249.95	-1.89	0.03	8.00	1.89	1915335.13	11971924.61	
2300.00	8.16	179.2	2299.66	-7.25	0.11	8.00	7.25	1915335.21	11971919.25	
2350.00	12.16	179.2	2348.86	-16.07	0.23	8.00	16.07	1915335.33	11971910.43	
2400.00	16.16	179.2	2397.33	-28.30	0.41	8.00	28.30	1915335.51	11971898.20	
2450.00	20.16	179.2	2444.83	-43.87	0.64	8.00	43.88	1915335.74	11971882.63	
2500.00	24.16	179.2	2491.13	-62.73	0.91	8.00	62.73	1915336.01	11971863.77	
2550.00	28.16	179.2	2536.00	-84.77	1.23	8.00	84.77	1915336.33	11971841.73	
2600.00	32.16	179.2	2579.22	-109.88	1.59	8.00	109.89	1915336.69	11971816.62	
2650.00	36.16	179.2	2620.59	-137.94	2.00	8.00	137.96	1915337.10	11971788.56	
2700.00	40.16	179.2	2659.89	-168.83	2.45	8.00	168.85	1915337.55	11971757.67	
2750.00	44.16	179.2	2696.95	-202.38	2.93	8.00	202.40	1915338.03	11971724.12	
2800.00	48.16	179.2	2731.57	-238.43	3.45	8.00	238.46	1915338.55	11971688.07	
2850.00	52.16	179.2	2763.60	-276.81	4.01	8.00	276.84	1915339.11	11971649.69	
*** 55 DEGREE TANGENT (at MD = 2885.50)										
2885.50	55.00	179.2	2784.67	-305.37	4.42	8.00	305.40	1915339.52	11971621.13	
2900.00	55.00	179.2	2792.99	-317.25	4.60	0.00	317.28	1915339.70	11971609.25	
2950.00	55.00	179.2	2821.67	-358.20	5.19	0.00	358.24	1915340.29	11971568.30	
3000.00	55.00	179.2	2850.35	-399.15	5.78	0.00	399.20	1915340.88	11971527.35	
*** 12 DEGREE BUILD (at MD = 3035.50)										
3035.50	55.00	179.2	2870.71	-428.23	6.20	0.00	428.28	1915341.30	11971498.27	
3050.00	56.74	179.2	2878.85	-440.23	6.38	12.00	440.28	1915341.48	11971486.27	
3100.00	62.74	179.2	2904.03	-483.40	7.00	12.00	483.45	1915342.10	11971443.10	
3150.00	68.74	179.2	2924.57	-528.95	7.66	12.00	529.01	1915342.76	11971397.55	
3200.00	74.74	179.2	2940.22	-576.41	8.35	12.00	576.47	1915343.45	11971350.09	
3250.00	80.74	179.2	2950.84	-625.24	9.06	12.00	625.31	1915344.16	11971301.26	
3300.00	86.74	179.2	2956.29	-674.92	9.78	12.00	674.99	1915344.88	11971251.58	
*** LANDING POINT (at MD = 3331.33)										
3331.33	90.50	179.2	2957.04	-706.23	10.23	12.00	706.31	1915345.33	11971220.27	
3350.00	90.50	179.2	2956.88	-724.90	10.50	0.00	724.97	1915345.60	11971201.60	
3400.00	90.50	179.2	2956.44	-774.89	11.23	0.00	774.97	1915346.33	11971151.61	
3450.00	90.50	179.2	2956.01	-824.88	11.95	0.00	824.97	1915347.05	11971101.62	
3500.00	90.50	179.2	2955.57	-874.87	12.67	0.00	874.97	1915347.77	11971051.63	

Medicine Hat State Com #2H, Plan 1

Operator Mack Energy Corp	Units feet, %/100ft	15:41 Tuesday, June 11, 2019 Page 2 of 4
Field Round Tank	County Chaves	Vertical Section Azimuth 179.17
Well Name Medicine Hat State Com #2H	State New Mexico	Survey Calculation Method Minimum Curvature
Plan 1	Country USA	Database Access

Location SL: 500 FNL & 2285 FWL Sec 35-T15S-R28E BHL: 1 FSL & 2285 FWL Sec 35-T15S-R28E	Map Zone UTM	Lat Long Ref
Site	Surface X 1915335.1	Surface Long
Slot Name	Surface Y 11971926.5	Surface Lat
Well Number	Surface Z	Global Z Ref Mean Sea Level
Project	Ground Level 3577.4	Local North Ref Grid
UWI		
API		
MD/TVD Ref 3590.4		

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
#	deg	deg	#	#	#	%/100ft	#	#	#	#
3550.00	90.50	179.2	2955.13	-924.87	13.40	0.00	924.96	1915348.50	11971001.63	
3600.00	90.50	179.2	2954.70	-974.86	14.12	0.00	974.96	1915349.22	11970951.64	
3650.00	90.50	179.2	2954.26	-1024.85	14.85	0.00	1024.96	1915349.95	11970901.65	
3700.00	90.50	179.2	2953.82	-1074.85	15.57	0.00	1074.96	1915350.67	11970851.65	
3750.00	90.50	179.2	2953.39	-1124.84	16.30	0.00	1124.96	1915351.40	11970801.66	
3800.00	90.50	179.2	2952.95	-1174.83	17.02	0.00	1174.95	1915352.12	11970751.67	
3850.00	90.50	179.2	2952.52	-1224.82	17.74	0.00	1224.95	1915352.84	11970701.68	
3900.00	90.50	179.2	2952.08	-1274.82	18.47	0.00	1274.95	1915353.57	11970651.68	
3950.00	90.50	179.2	2951.64	-1324.81	19.19	0.00	1324.95	1915354.29	11970601.69	
4000.00	90.50	179.2	2951.21	-1374.80	19.92	0.00	1374.95	1915355.02	11970551.70	
4050.00	90.50	179.2	2950.77	-1424.80	20.64	0.00	1424.94	1915355.74	11970501.70	
4100.00	90.50	179.2	2950.33	-1474.79	21.37	0.00	1474.94	1915356.47	11970451.71	
4150.00	90.50	179.2	2949.90	-1524.78	22.09	0.00	1524.94	1915357.19	11970401.72	
4200.00	90.50	179.2	2949.46	-1574.77	22.81	0.00	1574.94	1915357.91	11970351.73	
4250.00	90.50	179.2	2949.02	-1624.77	23.54	0.00	1624.94	1915358.64	11970301.73	
4300.00	90.50	179.2	2948.59	-1674.76	24.26	0.00	1674.94	1915359.36	11970251.74	
4350.00	90.50	179.2	2948.15	-1724.75	24.99	0.00	1724.93	1915360.09	11970201.75	
4400.00	90.50	179.2	2947.72	-1774.75	25.71	0.00	1774.93	1915360.81	11970151.75	
4450.00	90.50	179.2	2947.28	-1824.74	26.44	0.00	1824.93	1915361.54	11970101.76	
4500.00	90.50	179.2	2946.84	-1874.73	27.16	0.00	1874.93	1915362.26	11970051.77	
4550.00	90.50	179.2	2946.41	-1924.72	27.88	0.00	1924.93	1915362.98	11970001.78	
4600.00	90.50	179.2	2945.97	-1974.72	28.61	0.00	1974.92	1915363.71	11969951.78	
4650.00	90.50	179.2	2945.53	-2024.71	29.33	0.00	2024.92	1915364.43	11969901.79	
4700.00	90.50	179.2	2945.10	-2074.70	30.06	0.00	2074.92	1915365.16	11969851.80	
4750.00	90.50	179.2	2944.66	-2124.70	30.78	0.00	2124.92	1915365.88	11969801.80	
4800.00	90.50	179.2	2944.22	-2174.69	31.51	0.00	2174.92	1915366.61	11969751.81	
4850.00	90.50	179.2	2943.79	-2224.68	32.23	0.00	2224.91	1915367.33	11969701.82	
4900.00	90.50	179.2	2943.35	-2274.67	32.95	0.00	2274.91	1915368.05	11969651.83	
4950.00	90.50	179.2	2942.92	-2324.67	33.68	0.00	2324.91	1915368.78	11969601.83	
5000.00	90.50	179.2	2942.48	-2374.66	34.40	0.00	2374.91	1915369.50	11969551.84	
5050.00	90.50	179.2	2942.04	-2424.65	35.13	0.00	2424.91	1915370.23	11969501.85	
5100.00	90.50	179.2	2941.61	-2474.65	35.85	0.00	2474.90	1915370.95	11969451.86	
5150.00	90.50	179.2	2941.17	-2524.64	36.58	0.00	2524.90	1915371.68	11969401.86	
5200.00	90.50	179.2	2940.73	-2574.63	37.30	0.00	2574.90	1915372.40	11969351.87	
5250.00	90.50	179.2	2940.30	-2624.62	38.02	0.00	2624.90	1915373.12	11969301.88	
5300.00	90.50	179.2	2939.86	-2674.62	38.75	0.00	2674.90	1915373.85	11969251.88	
5350.00	90.50	179.2	2939.43	-2724.61	39.47	0.00	2724.90	1915374.57	11969201.89	

Medicine Hat State Com #2H, Plan 1

Operator Mack Energy Corp	Units feet, °/100ft	15:41 Tuesday, June 11, 2019 Page 3 of 4
Field Round Tank	County Chaves	Vertical Section Azimuth 179.17
Well Name Medicine Hat State Com #2H	State New Mexico	Survey Calculation Method Minimum Curvature
Plan 1	Country USA	Database Access

Location SL: 500 FNL & 2285 FWL Sec 35-T15S-R28E BHL: 1 FSL & 2285 FWL Sec 35-T15S-R28E	Map Zone UTM	Lat Long Ref
Site	Surface X 1915335.1	Surface Long
Slot Name	Surface Y 11971926.5	Surface Lat
Well Number	Surface Z	Global Z Ref Mean Sea Level
Project	Ground Level 3577.4	Local North Ref Grid

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
5400.00	90.50	179.2	2938.99	-2774.60	40.20	0.00	2774.89	1915375.30	11969151.90	
5450.00	90.50	179.2	2938.55	-2824.60	40.92	0.00	2824.89	1915376.02	11969101.91	
5500.00	90.50	179.2	2938.12	-2874.59	41.64	0.00	2874.89	1915376.74	11969051.91	
5550.00	90.50	179.2	2937.68	-2924.58	42.37	0.00	2924.89	1915377.47	11969001.92	
5600.00	90.50	179.2	2937.24	-2974.57	43.09	0.00	2974.89	1915378.19	11968951.93	
5650.00	90.50	179.2	2936.81	-3024.57	43.82	0.00	3024.88	1915378.92	11968901.93	
5700.00	90.50	179.2	2936.37	-3074.56	44.54	0.00	3074.88	1915379.64	11968851.94	
5750.00	90.50	179.2	2935.93	-3124.55	45.27	0.00	3124.88	1915380.37	11968801.95	
5800.00	90.50	179.2	2935.50	-3174.54	45.99	0.00	3174.88	1915381.09	11968751.96	
5850.00	90.50	179.2	2935.06	-3224.54	46.71	0.00	3224.88	1915381.81	11968701.96	
5900.00	90.50	179.2	2934.63	-3274.53	47.44	0.00	3274.87	1915382.54	11968651.97	
5950.00	90.50	179.2	2934.19	-3324.52	48.16	0.00	3324.87	1915383.26	11968601.98	
6000.00	90.50	179.2	2933.75	-3374.52	48.89	0.00	3374.87	1915383.99	11968551.98	
6050.00	90.50	179.2	2933.32	-3424.51	49.61	0.00	3424.87	1915384.71	11968501.99	
6100.00	90.50	179.2	2932.88	-3474.50	50.34	0.00	3474.87	1915385.44	11968452.00	
6150.00	90.50	179.2	2932.44	-3524.49	51.06	0.00	3524.86	1915386.16	11968402.01	
6200.00	90.50	179.2	2932.01	-3574.49	51.78	0.00	3574.86	1915386.88	11968352.01	
6250.00	90.50	179.2	2931.57	-3624.48	52.51	0.00	3624.86	1915387.61	11968302.02	
6300.00	90.50	179.2	2931.14	-3674.47	53.23	0.00	3674.86	1915388.33	11968252.03	
6350.00	90.50	179.2	2930.70	-3724.47	53.96	0.00	3724.86	1915389.06	11968202.03	
6400.00	90.50	179.2	2930.26	-3774.46	54.68	0.00	3774.86	1915389.78	11968152.04	
6450.00	90.50	179.2	2929.83	-3824.45	55.41	0.00	3824.85	1915390.51	11968102.05	
6500.00	90.50	179.2	2929.39	-3874.44	56.13	0.00	3874.85	1915391.23	11968052.06	
6550.00	90.50	179.2	2928.95	-3924.44	56.85	0.00	3924.85	1915391.95	11968002.06	
6600.00	90.50	179.2	2928.52	-3974.43	57.58	0.00	3974.85	1915392.68	11967952.07	
6650.00	90.50	179.2	2928.08	-4024.42	58.30	0.00	4024.85	1915393.40	11967902.08	
6700.00	90.50	179.2	2927.64	-4074.42	59.03	0.00	4074.84	1915394.13	11967852.08	
6750.00	90.50	179.2	2927.21	-4124.41	59.75	0.00	4124.84	1915394.85	11967802.09	
6800.00	90.50	179.2	2926.77	-4174.40	60.48	0.00	4174.84	1915395.58	11967752.10	
6850.00	90.50	179.2	2926.34	-4224.39	61.20	0.00	4224.84	1915396.30	11967702.11	
6900.00	90.50	179.2	2925.90	-4274.39	61.92	0.00	4274.84	1915397.02	11967652.11	
6950.00	90.50	179.2	2925.46	-4324.38	62.65	0.00	4324.83	1915397.75	11967602.12	
7000.00	90.50	179.2	2925.03	-4374.37	63.37	0.00	4374.83	1915398.47	11967552.13	
7050.00	90.50	179.2	2924.59	-4424.37	64.10	0.00	4424.83	1915399.20	11967502.13	
7100.00	90.50	179.2	2924.15	-4474.36	64.82	0.00	4474.83	1915399.92	11967452.14	
7150.00	90.50	179.2	2923.72	-4524.35	65.55	0.00	4524.83	1915400.65	11967402.15	
7200.00	90.50	179.2	2923.28	-4574.34	66.27	0.00	4574.82	1915401.37	11967352.16	

Medicine Hat State Com #2H, Plan 1

Operator Mack Energy Corp	Units feet, °/100ft	15:41 Tuesday, June 11, 2019 Page 4 of 4
Field Round Tank	County Chaves	Vertical Section Azimuth 179.17
Well Name Medicine Hat State Com #2H	State New Mexico	Survey Calculation Method Minimum Curvature
Plan 1	Country USA	Database Access

Location SL: 500 FNL & 2285 FWL Sec 35-T15S-R28E BHL: 1 FSL & 2285 FWL Sec 35-T15S-R28E	Map Zone UTM	Lat Long Ref
Site	Surface X 1915335.1	Surface Long
Slot Name	Surface Y 11971926.5	Surface Lat
Well Number	Surface Z	Global Z Ref Mean Sea Level
Project	Ground Level 3577.4	Local North Ref Grid

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
#	deg	deg	#	#	#	%/100#	#	#	#	#
7250.00	90.50	179.2	2922.84	-4624.34	66.99	0.00	4624.82	1915402.09	11967302.16	
7300.00	90.50	179.2	2922.41	-4674.33	67.72	0.00	4674.82	1915402.82	11967252.17	
*** TD (at MD = 7341.98)										
7341.98	90.50	179.2	2922.04	-4716.31	68.33	0.00	4716.80	1915403.43	11967210.19	