

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
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

NMOCD Rec'd: 10/09/2020

Form C-103

Revised July 18, 2013

WELL API NO. 30-015-45568
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Kaiser 18
8. Well Number 1H
9. OGRID Number 330211
10. Pool name or Wildcat Red Lake; Gloriet-Yeso
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3290.8' GR

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other	
2. Name of Operator Redwood Operating LLC	
3. Address of Operator P.O. Box 1370 Artesia, NM 88210	
4. Well Location Unit Letter F : 1970 feet from the North line and 2008 feet from the West line Section 18 Township 18S Range 27E NMPM County Eddy, NM	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3290.8' GR	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: Change to APD ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Redwood Operating LLC request the following changes to the Kaiser 18 1H APD

BHL- Unit E, Sec. 13 T18S R26E 1650 FNL 1 FWL Eddy County

Surface- Drill 12 1/4" hole to 1230', Run 9 5/8", 36#, J-55, ST&C csg to 1230', cmt with 450sx Class C to surface
Production- Drill 8 3/4" hole to 9965', Run 7", 26#, L-80, LT&C csg to 3450-9965', 7", 26#, L-80, BT&C csg to 2000-34 5 1/2", 17#, L-80, BT&C csg to 0-2000', cmt with 200sx 35/65 Perlite Class C 5%, 1580sx PVL to Surface.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Deana Weaver TITLE Production Clerk DATE 10/8/2020

Type or print name Deana Weaver E-mail address: dweaver@mec.com PHONE: 575-748-1288

For State Use Only

APPROVED BY: John Garcia TITLE Petroleum Engineer DATE 11/3/2020

Conditions of Approval (if any):

KP 10/26/2020 GEO Review

District I1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720District II811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720District III1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170District IV1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-45568	² Pool Code 51120	³ Pool Name Red Lake; Gloriet Yeso
⁴ Property Code 323060	⁵ Property Name KAISER 18	⁶ Well Number 1H
⁷ OGRID No. 330211	⁸ Operator Name REDWOOD OPERATING LLC	⁹ Elevation 3290.8

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	18	18 S	27 E		1970	NORTH	2008	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	13	18 S	26 E		1650	NORTH	1	WEST	EDDY

¹² Dedicated Acres 200	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Deana Weaver 10/9/2020

Signature Date

Deana Weaver

Printed Name

dweaver@mec.com

E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

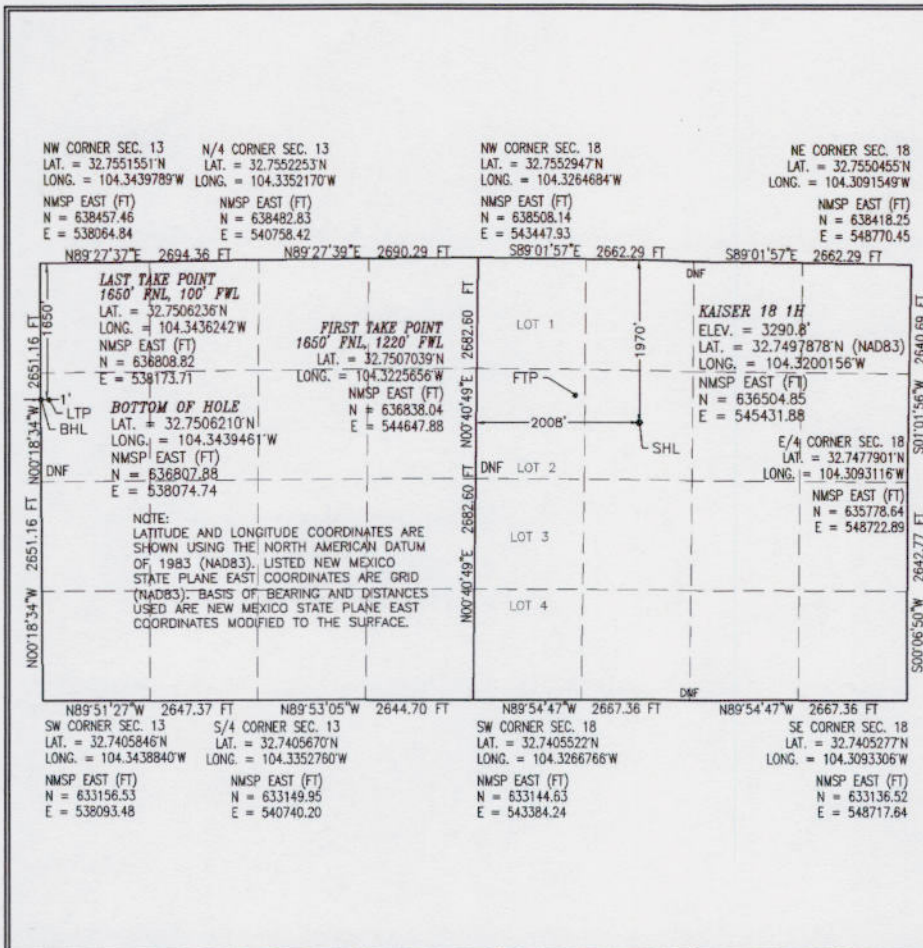
SEPTEMBER 22, 2020

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number: FIRM NO. 12797

EXP. DATE NO. 6786C



Intent ☐ XXXX As Drilled ☐

API #

Operator Name:	Property Name:	Well Number
REDWOOD OPERATING LLC	KAISER 18	1H

Kick Off Point (KOP)

UL F	Section 18	Township 18S	Range 27E	Lot	Feet 1970	From N/S NORTH	Feet 2008	From E/W WEST	County EDDY
Latitude 32.7497878					Longitude 104.3200156			NAD 83	

First Take Point (FTP)

UL F	Section 18	Township 18S	Range 27E	Lot 2	Feet 1650	From N/S NORTH	Feet 1220	From E/W WEST	County EDDY
Latitude 32.7507039					Longitude 104.3225656			NAD 83	

Last Take Point (LTP)

UL E	Section 13	Township 18S	Range 26E	Lot	Feet 1650	From N/S NORTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.7506236					Longitude 104.3436242			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

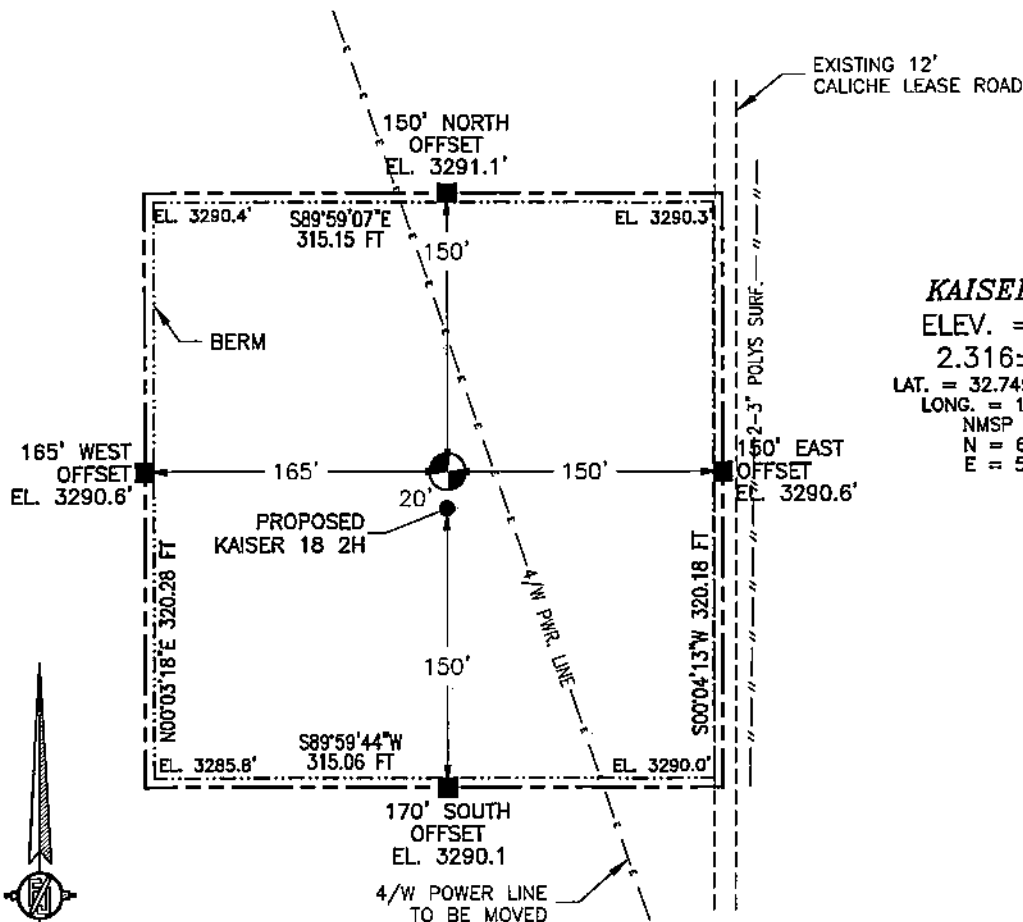
API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018

SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY 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



KAISER 18 1H
ELEV. = 3290.8'
2.316± ACRES
LAT. = 32.7497878°N (NAD83)
LONG. = 104.3200156°W
NMSP EAST (FT)
N = 636504.85
E = 545431.88

0 10 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM CR 39 (FOUR DINKUS) AND CR 44 (FANNING) GO EAST ON CALICHE ROAD 1.0 MILE, TURN RIGHT AND GO SOUTH 0.35 OF A MILE, TURN LEFT AND GO EAST 0.3 OF A MILE, BEND LEFT GO NORTHEAST 0.27 OF A MILE, TURN RIGHT GO SOUTH 523', TURN LEFT GO EAST 873', TURN RIGHT GO SOUTH 283' TO THE NORTHEAST PAD CORNER FOR THIS LOCATION.

I, FILMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I HAVE DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE MINIMUM KNOWLEDGE AND SKILL STANDARDS FOR THIS TYPE OF SURVEY.

FILMON F. JARAMILLO

MADISON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

REDWOOD OPERATING LLC

KAISER 18 1H

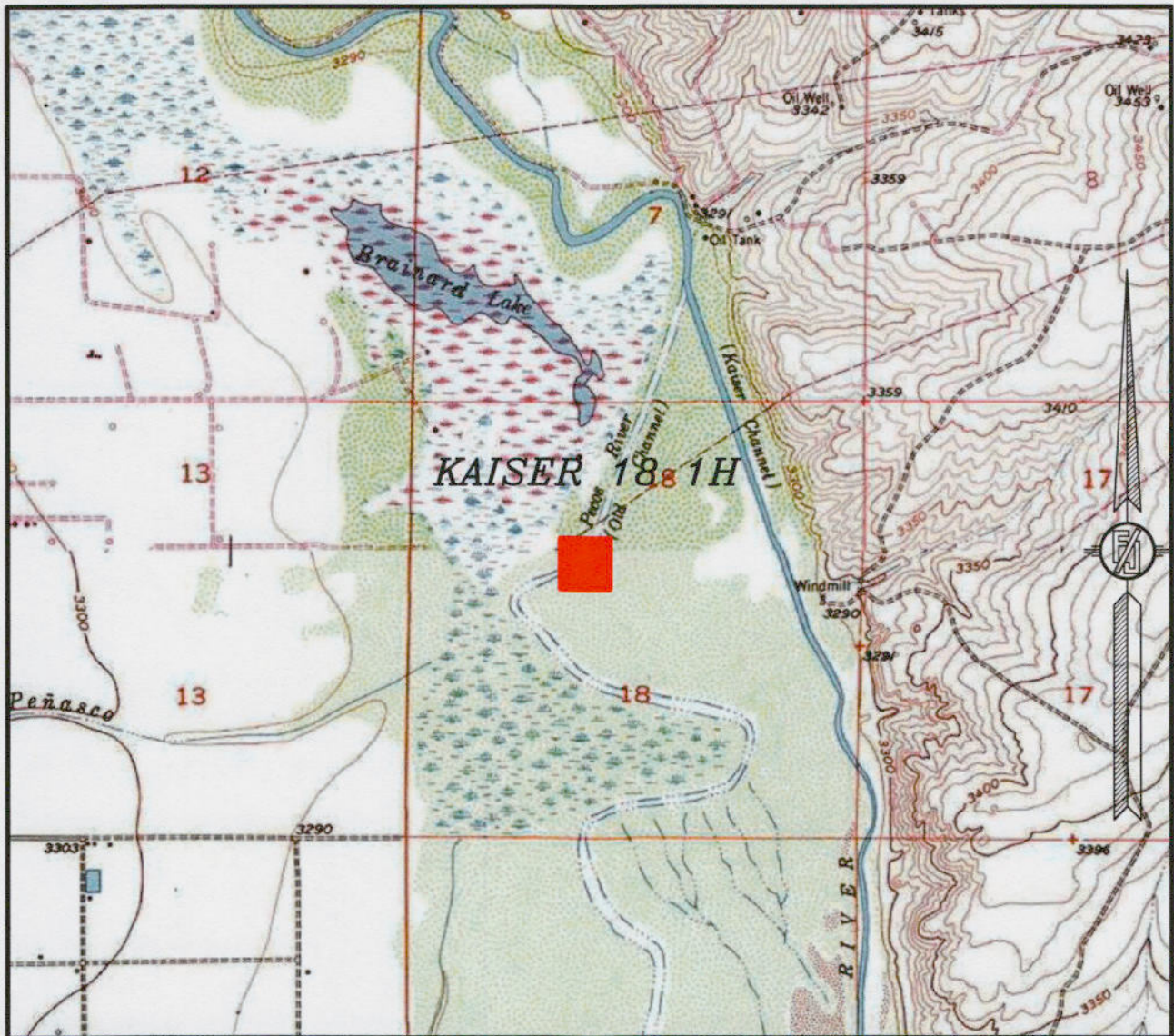
LOCATED 1970 FT. FROM THE NORTH LINE
AND 2008 FT. FROM THE WEST LINE OF
SECTION 18, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 22, 2020

SURVEY NO. 6786C

CARLSBAD, NEW MEXICO

SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
SPRING LAKE

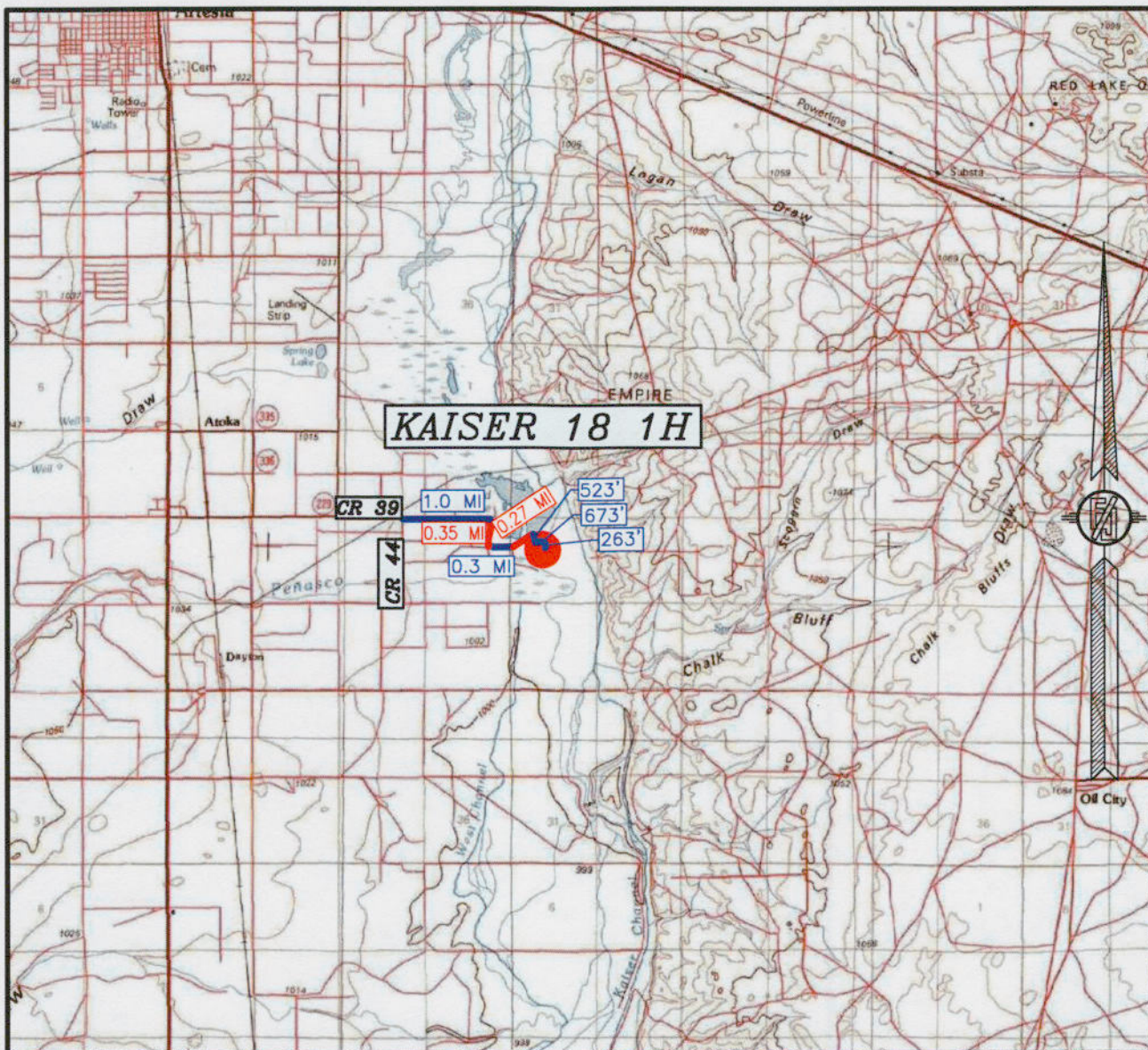
NOT TO SCALE

REDWOOD OPERATING LLC
KAISER 18 1H
LOCATED 1970 FT. FROM THE NORTH LINE
AND 2008 FT. FROM THE WEST LINE OF
SECTION 18, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 22, 2020

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO SURVEY NO. 6786C

SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

REDWOOD OPERATING LLC
KAISER 18 1H

LOCATED 1970 FT. FROM THE NORTH LINE
AND 2008 FT. FROM THE WEST LINE OF
SECTION 18, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 22, 2020

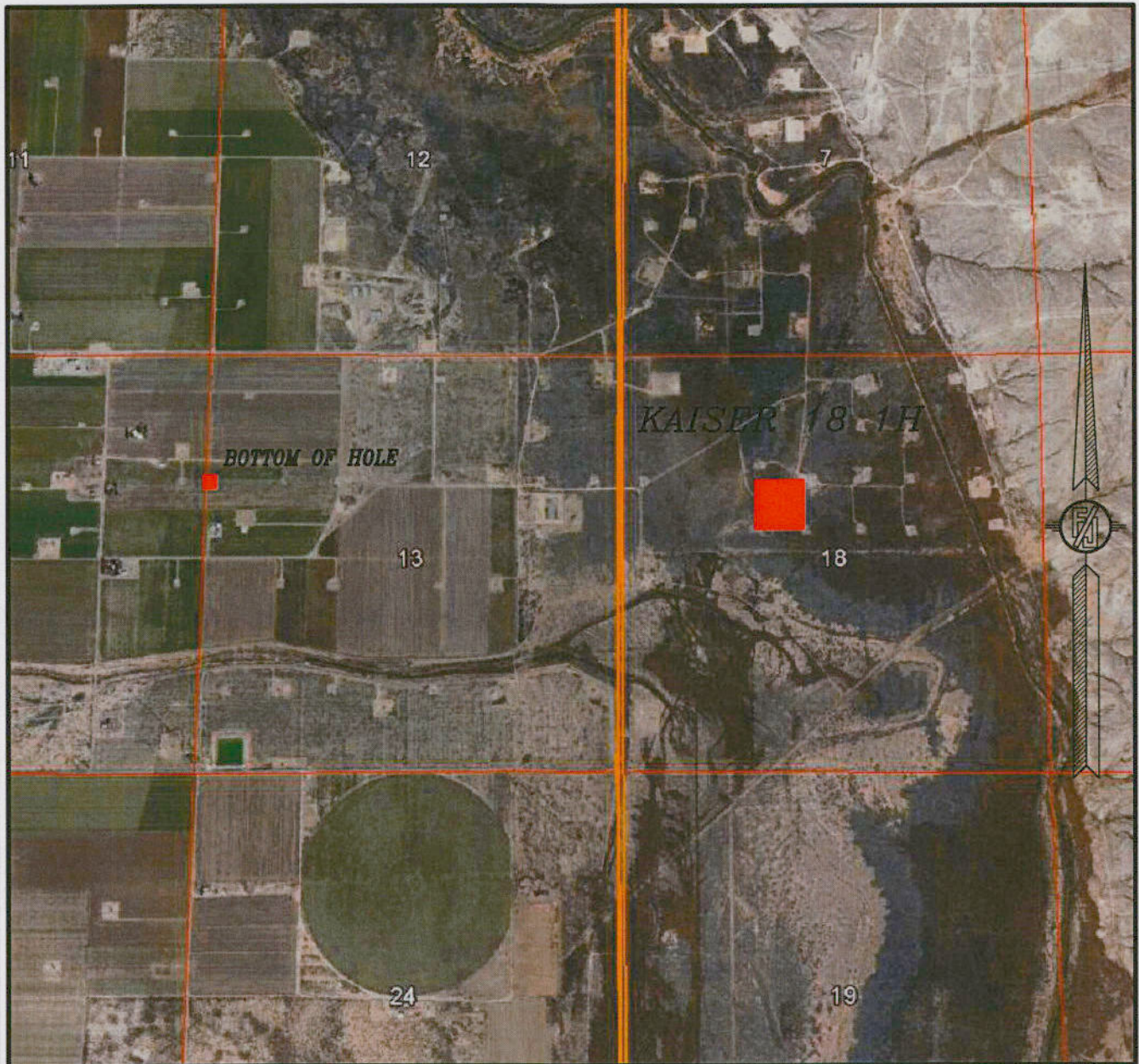
DIRECTIONS TO LOCATION

FROM CR 39 (FOUR DINKUS) AND CR 44 (FANNING) GO EAST ON
CALICHE ROAD 1.0 MILE, TURN RIGHT AND GO SOUTH 0.35 OF A
MILE, TURN LEFT AND GO EAST 0.3 OF A MILE, BEND LEFT GO
NORTHEAST 0.27 OF A MILE, TURN RIGHT GO SOUTH 523', TURN
LEFT GO EAST 673', TURN RIGHT GO SOUTH 263' TO THE NORTHEAST
PAD CORNER FOR THIS LOCATION.

SURVEY NO. 6786C

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

SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
DECEMBER 2019

REDWOOD OPERATING LLC
KAISER 18 1H
LOCATED 1970 FT. FROM THE NORTH LINE
AND 2008 FT. FROM THE WEST LINE OF
SECTION 18, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 22, 2020

SURVEY NO. 6786C

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

SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
ACCESS AERIAL ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
DECEMBER 2019

REDWOOD OPERATING LLC
KAISER 18 1H

LOCATED 1970 FT. FROM THE NORTH LINE
AND 2008 FT. FROM THE WEST LINE OF
SECTION 18, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 22, 2020

SURVEY NO. 6786C

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

Kaiser 18-1H, Plan 1

Operator	Red Lake	Units	feet, °/100ft	15:35 Friday, October 02, 2020	Page 1 of
Field	Red Lake	County	Eddy	Vertical Section Azimuth	269.74
Well Name	Kaiser 18-1H	State	New Mexico	Survey Calculation Method	Minimum Curvature
Plan	1	Country	USA	Database	Access

Location	SL: 1970 FNL & 2008 FWL Sec 18-T18S-R27E BHL: 1650 FNL & 1 FWL Sec 13-T18S-R26E			Map Zone	UTM	Lat Long Ref	
Site				Surface X	1849488.3	Surface Long	
Slot Name		UWI		Surface Y	11888162.3	Surface Lat	
Well Number		API		Surface Z	3308.8	Global Z Ref	KB
Project		MD/TVD Ref	KB	Ground Level	3290.8	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
*** TIE (at MD = 1983.00)										
1983.00	0.00	0.0	1983.00	0.00	0.00		0.00	1849488.30	11888162.30	1325.80
2000.00	0.00	0.0	2000.00	0.00	0.00	0.00	0.00	1849488.30	11888162.30	1308.80
2050.00	0.00	0.0	2050.00	0.00	0.00	0.00	0.00	1849488.30	11888162.30	1258.80
*** KOP 9 DEGREES (at MD = 2083.00)										
2083.00	0.00	0.0	2083.00	0.00	0.00	0.00	0.00	1849488.30	11888162.30	1225.80
2100.00	1.36	298.5	2100.00	0.10	-0.18	8.00	0.18	1849488.12	11888162.40	1208.80
2150.00	5.36	298.5	2149.90	1.49	-2.75	8.00	2.75	1849485.55	11888163.79	1158.90
2200.00	9.36	298.5	2199.48	4.54	-8.38	8.00	8.36	1849479.92	11888166.84	1109.32
2250.00	13.36	298.5	2248.49	9.23	-17.04	8.00	17.00	1849471.26	11888171.53	1060.31
2300.00	17.36	298.5	2296.70	15.54	-28.68	8.00	28.61	1849459.62	11888177.84	1012.11
2350.00	21.36	298.5	2343.86	23.44	-43.25	8.00	43.15	1849445.05	11888185.74	964.94
2400.00	25.36	298.5	2389.75	32.88	-60.68	8.00	60.53	1849427.62	11888195.18	919.05
2450.00	29.36	298.5	2434.15	43.82	-80.88	8.00	80.68	1849407.42	11888206.12	874.65
2500.00	33.36	298.5	2476.84	56.22	-103.76	8.00	103.50	1849384.54	11888218.52	831.96
2550.00	37.36	298.5	2517.60	70.00	-129.19	8.00	128.87	1849359.11	11888232.30	791.20
2600.00	41.36	298.5	2556.25	85.10	-157.07	8.00	156.68	1849331.23	11888247.40	752.55
2650.00	45.36	298.5	2592.60	101.45	-187.24	8.00	186.78	1849301.06	11888263.75	716.20
2700.00	49.36	298.5	2626.46	118.97	-219.58	8.00	219.03	1849268.72	11888281.27	682.34
2750.00	53.36	298.5	2657.68	137.57	-253.91	8.00	253.28	1849234.39	11888299.87	651.12
*** 55 DEGREE TANGENT (at MD = 2770.50)										
2770.50	55.00	298.5	2669.67	145.49	-268.52	8.00	267.86	1849219.78	11888307.79	639.13
2800.00	55.00	298.5	2686.59	157.00	-289.77	0.00	289.05	1849198.53	11888319.30	622.21
2850.00	55.00	298.5	2715.27	176.52	-325.78	0.00	324.97	1849162.52	11888338.82	593.53
2900.00	55.00	298.5	2743.95	196.03	-361.79	0.00	360.90	1849126.51	11888358.33	564.85
2950.00	55.00	298.5	2772.63	215.54	-397.80	0.00	396.82	1849090.50	11888377.84	536.17
3000.00	55.00	298.5	2801.31	235.05	-433.81	0.00	432.74	1849054.49	11888397.35	507.49
*** 12 DEGREE BUILD (at MD = 3020.50)										
3020.50	55.00	298.5	2813.07	243.05	-448.58	0.00	447.47	1849039.72	11888405.35	495.73
3050.00	57.64	295.6	2829.43	254.20	-470.44	12.00	469.28	1849017.86	11888416.50	479.37
3100.00	62.26	291.2	2854.47	271.34	-510.15	12.00	508.91	1848978.15	11888433.64	454.33
3150.00	67.00	287.1	2875.90	286.12	-552.81	12.00	551.51	1848935.49	11888448.42	432.90
3200.00	71.84	283.3	2893.47	298.38	-597.96	12.00	596.60	1848890.34	11888460.68	415.33
3250.00	76.75	279.7	2907.01	307.98	-645.11	12.00	643.70	1848843.19	11888470.28	401.79
3300.00	81.70	276.3	2916.36	314.81	-693.72	12.00	692.29	1848794.58	11888477.11	392.44
3350.00	86.69	272.9	2921.42	318.81	-743.28	12.00	741.83	1848745.02	11888481.11	387.38
*** LANDING POINT (at MD = 3398.14)										
3398.14	91.50	269.7	2922.18	319.93	-791.38	12.00	789.92	1848696.92	11888482.23	386.62
3400.00	91.50	269.7	2922.13	319.92	-793.24	0.00	791.78	1848695.06	11888482.22	386.67

Kaiser 18-1H, Plan 1

Operator		Units	feet, °/100ft	15:35 Friday, October 02, 2020	Page 2 of
Field	Red Lake	County	Eddy	Vertical Section Azimuth	269.74
Well Name	Kaiser 18-1H	State	New Mexico	Survey Calculation Method	Minimum Curvature
Plan	1	Country	USA	Database	Access

Location	SL: 1970 FNL & 2008 FWL Sec 18-T18S-R27E BHL: 1650 FNL & 1 FWL Sec 13-T18S-R26E			Map Zone	UTM	Lat Long Ref	
Site				Surface X	1849488.3	Surface Long	
Slot Name		UWI		Surface Y	11888162.3	Surface Lat	
Well Number		API		Surface Z	3308.8	Global Z Ref	KB
Project		MD/TVD Ref	KB	Ground Level	3290.8	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
3450.00	91.50	269.7	2920.82	319.69	-843.23	0.00	841.77	1848645.07	11888481.99	387.98
3500.00	91.50	269.7	2919.51	319.47	-893.21	0.00	891.75	1848595.09	11888481.77	389.29
3550.00	91.50	269.7	2918.20	319.24	-943.19	0.00	941.73	1848545.11	11888481.54	390.60
3600.00	91.50	269.7	2916.89	319.01	-993.17	0.00	991.71	1848495.13	11888481.31	391.91
3650.00	91.50	269.7	2915.58	318.79	-1043.15	0.00	1041.70	1848445.15	11888481.09	393.22
3700.00	91.50	269.7	2914.27	318.56	-1093.14	0.00	1091.68	1848395.16	11888480.86	394.53
3750.00	91.50	269.7	2912.97	318.33	-1143.12	0.00	1141.66	1848345.18	11888480.63	395.83
3800.00	91.50	269.7	2911.66	318.11	-1193.10	0.00	1191.65	1848295.20	11888480.41	397.14
3850.00	91.50	269.7	2910.35	317.88	-1243.08	0.00	1241.63	1848245.22	11888480.18	398.45
3900.00	91.50	269.7	2909.04	317.65	-1293.07	0.00	1291.61	1848195.23	11888479.95	399.76
3950.00	91.50	269.7	2907.73	317.43	-1343.05	0.00	1341.59	1848145.25	11888479.73	401.07
4000.00	91.50	269.7	2906.42	317.20	-1393.03	0.00	1391.58	1848095.27	11888479.50	402.38
4050.00	91.50	269.7	2905.11	316.97	-1443.01	0.00	1441.56	1848045.29	11888479.27	403.69
4100.00	91.50	269.7	2903.80	316.75	-1493.00	0.00	1491.54	1847995.30	11888479.05	405.00
4150.00	91.50	269.7	2902.50	316.52	-1542.98	0.00	1541.53	1847945.32	11888478.82	406.30
4200.00	91.50	269.7	2901.19	316.29	-1592.96	0.00	1591.51	1847895.34	11888478.59	407.61
4250.00	91.50	269.7	2899.88	316.06	-1642.94	0.00	1641.49	1847845.36	11888478.36	408.92
4300.00	91.50	269.7	2898.57	315.84	-1692.93	0.00	1691.47	1847795.38	11888478.14	410.23
4350.00	91.50	269.7	2897.26	315.61	-1742.91	0.00	1741.46	1847745.39	11888477.91	411.54
4400.00	91.50	269.7	2895.95	315.38	-1792.89	0.00	1791.44	1847695.41	11888477.68	412.85
4450.00	91.50	269.7	2894.64	315.16	-1842.87	0.00	1841.42	1847645.43	11888477.46	414.16
4500.00	91.50	269.7	2893.33	314.93	-1892.85	0.00	1891.41	1847595.45	11888477.23	415.47
4550.00	91.50	269.7	2892.02	314.70	-1942.84	0.00	1941.39	1847545.46	11888477.00	416.78
4600.00	91.50	269.7	2890.72	314.48	-1992.82	0.00	1991.37	1847495.48	11888476.78	418.08
4650.00	91.50	269.7	2889.41	314.25	-2042.80	0.00	2041.35	1847445.50	11888476.55	419.39
4700.00	91.50	269.7	2888.10	314.02	-2092.78	0.00	2091.34	1847395.52	11888476.32	420.70
4750.00	91.50	269.7	2886.79	313.80	-2142.77	0.00	2141.32	1847345.53	11888476.10	422.01
4800.00	91.50	269.7	2885.48	313.57	-2192.75	0.00	2191.30	1847295.55	11888475.87	423.32
4850.00	91.50	269.7	2884.17	313.34	-2242.73	0.00	2241.29	1847245.57	11888475.64	424.63
4900.00	91.50	269.7	2882.86	313.12	-2292.71	0.00	2291.27	1847195.59	11888475.42	425.94
4950.00	91.50	269.7	2881.55	312.89	-2342.70	0.00	2341.25	1847145.60	11888475.19	427.25
5000.00	91.50	269.7	2880.24	312.66	-2392.68	0.00	2391.23	1847095.62	11888474.96	428.56
5050.00	91.50	269.7	2878.94	312.44	-2442.66	0.00	2441.22	1847045.64	11888474.74	429.86
5100.00	91.50	269.7	2877.63	312.21	-2492.64	0.00	2491.20	1846995.66	11888474.51	431.17
5150.00	91.50	269.7	2876.32	311.98	-2542.63	0.00	2541.18	1846945.68	11888474.28	432.48
5200.00	91.50	269.7	2875.01	311.76	-2592.61	0.00	2591.17	1846895.69	11888474.06	433.79
5250.00	91.50	269.7	2873.70	311.53	-2642.59	0.00	2641.15	1846845.71	11888473.83	435.10

Kaiser 18-1H, Plan 1

Operator	Units feet, °/100ft	15:35 Friday, October 02, 2020 Page 3 of
Field Red Lake	County Eddy	Vertical Section Azimuth 269.74
Well Name Kaiser 18-1H	State New Mexico	Survey Calculation Method Minimum Curvature
Plan 1	Country USA	Database Access

Location SL: 1970 FNL & 2008 FWL Sec 18-T18S-R27E BHL: 1650 FNL & 1 FWL Sec 13-T18S-R26E	Map Zone UTM	Lat Long Ref
Site	Surface X 1849488.3	Surface Long
Slot Name	Surface Y 11888162.3	Surface Lat
Well Number	Surface Z 3308.8	Global Z Ref KB
Project	Ground Level 3290.8	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
5300.00	91.50	269.7	2872.39	311.30	-2692.57	0.00	2691.13	1846795.73	11888473.60	436.41
5350.00	91.50	269.7	2871.08	311.07	-2742.55	0.00	2741.11	1846745.75	11888473.37	437.72
5400.00	91.50	269.7	2869.77	310.85	-2792.54	0.00	2791.10	1846695.76	11888473.15	439.03
5450.00	91.50	269.7	2868.47	310.62	-2842.52	0.00	2841.08	1846645.78	11888472.92	440.34
5500.00	91.50	269.7	2867.16	310.39	-2892.50	0.00	2891.06	1846595.80	11888472.69	441.64
5550.00	91.50	269.7	2865.85	310.17	-2942.48	0.00	2941.05	1846545.82	11888472.47	442.95
5600.00	91.50	269.7	2864.54	309.94	-2992.47	0.00	2991.03	1846495.83	11888472.24	444.26
5650.00	91.50	269.7	2863.23	309.71	-3042.45	0.00	3041.01	1846445.85	11888472.01	445.57
5700.00	91.50	269.7	2861.92	309.49	-3092.43	0.00	3090.99	1846395.87	11888471.79	446.88
5750.00	91.50	269.7	2860.61	309.26	-3142.41	0.00	3140.98	1846345.89	11888471.56	448.19
5800.00	91.50	269.7	2859.30	309.03	-3192.40	0.00	3190.96	1846295.90	11888471.33	449.50
5850.00	91.50	269.7	2857.99	308.81	-3242.38	0.00	3240.94	1846245.92	11888471.11	450.81
5900.00	91.50	269.7	2856.69	308.58	-3292.36	0.00	3290.93	1846195.94	11888470.88	452.11
5950.00	91.50	269.7	2855.38	308.35	-3342.34	0.00	3340.91	1846145.96	11888470.65	453.42
6000.00	91.50	269.7	2854.07	308.13	-3392.33	0.00	3390.89	1846095.98	11888470.43	454.73
6050.00	91.50	269.7	2852.76	307.90	-3442.31	0.00	3440.87	1846045.99	11888470.20	456.04
6100.00	91.50	269.7	2851.45	307.67	-3492.29	0.00	3490.86	1845996.01	11888469.97	457.35
6150.00	91.50	269.7	2850.14	307.45	-3542.27	0.00	3540.84	1845946.03	11888469.75	458.66
6200.00	91.50	269.7	2848.83	307.22	-3592.25	0.00	3590.82	1845896.05	11888469.52	459.97
6250.00	91.50	269.7	2847.52	306.99	-3642.24	0.00	3640.81	1845846.06	11888469.29	461.28
6300.00	91.50	269.7	2846.21	306.77	-3692.22	0.00	3690.79	1845796.08	11888469.07	462.59
6350.00	91.50	269.7	2844.91	306.54	-3742.20	0.00	3740.77	1845746.10	11888468.84	463.89
6400.00	91.50	269.7	2843.60	306.31	-3792.18	0.00	3790.75	1845696.12	11888468.61	465.20
6450.00	91.50	269.7	2842.29	306.08	-3842.17	0.00	3840.74	1845646.13	11888468.38	466.51
6500.00	91.50	269.7	2840.98	305.86	-3892.15	0.00	3890.72	1845596.15	11888468.16	467.82
6550.00	91.50	269.7	2839.67	305.63	-3942.13	0.00	3940.70	1845546.17	11888467.93	469.13
6600.00	91.50	269.7	2838.36	305.40	-3992.11	0.00	3990.69	1845496.19	11888467.70	470.44
6650.00	91.50	269.7	2837.05	305.18	-4042.10	0.00	4040.67	1845446.20	11888467.48	471.75
6700.00	91.50	269.7	2835.74	304.95	-4092.08	0.00	4090.65	1845396.22	11888467.25	473.06
6750.00	91.50	269.7	2834.44	304.72	-4142.06	0.00	4140.63	1845346.24	11888467.02	474.37
6800.00	91.50	269.7	2833.13	304.50	-4192.04	0.00	4190.62	1845296.26	11888466.80	475.67
6850.00	91.50	269.7	2831.82	304.27	-4242.03	0.00	4240.60	1845246.28	11888466.57	476.98
6900.00	91.50	269.7	2830.51	304.04	-4292.01	0.00	4290.58	1845196.29	11888466.34	478.29
6950.00	91.50	269.7	2829.20	303.82	-4341.99	0.00	4340.57	1845146.31	11888466.12	479.60
7000.00	91.50	269.7	2827.89	303.59	-4391.97	0.00	4390.55	1845096.33	11888465.89	480.91
7050.00	91.50	269.7	2826.58	303.36	-4441.95	0.00	4440.53	1845046.35	11888465.66	482.22
7100.00	91.50	269.7	2825.27	303.14	-4491.94	0.00	4490.51	1844996.36	11888465.44	483.53
7150.00	91.50	269.7	2823.96	302.91	-4541.92	0.00	4540.50	1844946.38	11888465.21	484.84

Kaiser 18-1H, Plan 1

Operator	Red Lake	Units	feet, °/100ft	15:35 Friday, October 02, 2020	Page 4 of
Field	Red Lake	County	Eddy	Vertical Section Azimuth	269.74
Well Name	Kaiser 18-1H	State	New Mexico	Survey Calculation Method	Minimum Curvature
Plan	1	Country	USA	Database	Access

Location	SL: 1970 FNL & 2008 FWL Sec 18-T18S-R27E BHL: 1650 FNL & 1 FWL Sec 13-T18S-R26E	Map Zone	UTM	Lat Long Ref	
Site		Surface X	1849488.3	Surface Long	
Slot Name		Surface Y	11888162.3	Surface Lat	
Well Number		Surface Z	3308.8	Global Z Ref	KB
Project		Ground Level	3290.8	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
7200.00	91.50	269.7	2822.66	302.68	-4591.90	0.00	4590.48	1844896.40	11888464.98	486.14
7250.00	91.50	269.7	2821.35	302.46	-4641.88	0.00	4640.46	1844846.42	11888464.76	487.45
7300.00	91.50	269.7	2820.04	302.23	-4691.87	0.00	4690.45	1844796.43	11888464.53	488.76
7350.00	91.50	269.7	2818.73	302.00	-4741.85	0.00	4740.43	1844746.45	11888464.30	490.07
7400.00	91.50	269.7	2817.42	301.78	-4791.83	0.00	4790.41	1844696.47	11888464.08	491.38
7450.00	91.50	269.7	2816.11	301.55	-4841.81	0.00	4840.40	1844646.49	11888463.85	492.69
7500.00	91.50	269.7	2814.80	301.32	-4891.80	0.00	4890.38	1844596.50	11888463.62	494.00
7550.00	91.50	269.7	2813.49	301.10	-4941.78	0.00	4940.36	1844546.52	11888463.40	495.31
7600.00	91.50	269.7	2812.18	300.87	-4991.76	0.00	4990.34	1844496.54	11888463.17	496.62
7650.00	91.50	269.7	2810.88	300.64	-5041.74	0.00	5040.33	1844446.56	11888462.94	497.92
7700.00	91.50	269.7	2809.57	300.41	-5091.72	0.00	5090.31	1844396.58	11888462.71	499.23
7750.00	91.50	269.7	2808.26	300.19	-5141.71	0.00	5140.29	1844346.59	11888462.49	500.54
7800.00	91.50	269.7	2806.95	299.96	-5191.69	0.00	5190.28	1844296.61	11888462.26	501.85
7850.00	91.50	269.7	2805.64	299.73	-5241.67	0.00	5240.26	1844246.63	11888462.03	503.16
7900.00	91.50	269.7	2804.33	299.51	-5291.65	0.00	5290.24	1844196.65	11888461.81	504.47
7950.00	91.50	269.7	2803.02	299.28	-5341.64	0.00	5340.22	1844146.66	11888461.58	505.78
8000.00	91.50	269.7	2801.71	299.05	-5391.62	0.00	5390.21	1844096.68	11888461.35	507.09
8050.00	91.50	269.7	2800.41	298.83	-5441.60	0.00	5440.19	1844046.70	11888461.13	508.40
8100.00	91.50	269.7	2799.10	298.60	-5491.58	0.00	5490.17	1843996.72	11888460.90	509.70
8150.00	91.50	269.7	2797.79	298.37	-5541.57	0.00	5540.16	1843946.73	11888460.67	511.01
8200.00	91.50	269.7	2796.48	298.15	-5591.55	0.00	5590.14	1843896.75	11888460.45	512.32
8250.00	91.50	269.7	2795.17	297.92	-5641.53	0.00	5640.12	1843846.77	11888460.22	513.63
8300.00	91.50	269.7	2793.86	297.69	-5691.51	0.00	5690.10	1843796.79	11888459.99	514.94
8350.00	91.50	269.7	2792.55	297.47	-5741.50	0.00	5740.09	1843746.80	11888459.77	516.25
8400.00	91.50	269.7	2791.24	297.24	-5791.48	0.00	5790.07	1843696.82	11888459.54	517.56
8450.00	91.50	269.7	2789.93	297.01	-5841.46	0.00	5840.05	1843646.84	11888459.31	518.87
8500.00	91.50	269.7	2788.63	296.79	-5891.44	0.00	5890.04	1843596.86	11888459.09	520.17
8550.00	91.50	269.7	2787.32	296.56	-5941.42	0.00	5940.02	1843546.88	11888458.86	521.48
8600.00	91.50	269.7	2786.01	296.33	-5991.41	0.00	5990.00	1843496.89	11888458.63	522.79
8650.00	91.50	269.7	2784.70	296.11	-6041.39	0.00	6039.98	1843446.91	11888458.41	524.10
8700.00	91.50	269.7	2783.39	295.88	-6091.37	0.00	6089.97	1843396.93	11888458.18	525.41
8750.00	91.50	269.7	2782.08	295.65	-6141.35	0.00	6139.95	1843346.95	11888457.95	526.72
8800.00	91.50	269.7	2780.77	295.42	-6191.34	0.00	6189.93	1843296.96	11888457.72	528.03
8850.00	91.50	269.7	2779.46	295.20	-6241.32	0.00	6239.92	1843246.98	11888457.50	529.34
8900.00	91.50	269.7	2778.15	294.97	-6291.30	0.00	6289.90	1843197.00	11888457.27	530.65
8950.00	91.50	269.7	2776.85	294.74	-6341.28	0.00	6339.88	1843147.02	11888457.04	531.95
9000.00	91.50	269.7	2775.54	294.52	-6391.27	0.00	6389.86	1843097.03	11888456.82	533.26

Kaiser 18-1H, Plan 1

Operator		Units	feet, °/100ft	15:35 Friday, October 02, 2020	Page 5 of
Field	Red Lake	County	Eddy	Vertical Section Azimuth	269.74
Well Name	Kaiser 18-1H	State	New Mexico	Survey Calculation Method	Minimum Curvature
Plan	1	Country	USA	Database	Access

Location	SL: 1970 FNL & 2008 FWL Sec 18-T18S-R27E BHL: 1650 FNL & 1 FWL Sec 13-T18S-R26E		Map Zone	UTM	Lat Long Ref
Site			Surface X	1849488.3	Surface Long
Slot Name		UWI	Surface Y	11888162.3	Surface Lat
Well Number		API	Surface Z	3308.8	Global Z Ref KB
Project		MD/TVD Ref KB	Ground Level	3290.8	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
9050.00	91.50	269.7	2774.23	294.29	-6441.25	0.00	6439.85	1843047.05	11888456.59	534.57
9100.00	91.50	269.7	2772.92	294.06	-6491.23	0.00	6489.83	1842997.07	11888456.36	535.88
9150.00	91.50	269.7	2771.61	293.84	-6541.21	0.00	6539.81	1842947.09	11888456.14	537.19
9200.00	91.50	269.7	2770.30	293.61	-6591.20	0.00	6589.80	1842897.10	11888455.91	538.50
9250.00	91.50	269.7	2768.99	293.38	-6641.18	0.00	6639.78	1842847.12	11888455.68	539.81
9300.00	91.50	269.7	2767.68	293.16	-6691.16	0.00	6689.76	1842797.14	11888455.46	541.12
9350.00	91.50	269.7	2766.37	292.93	-6741.14	0.00	6739.74	1842747.16	11888455.23	542.43
9400.00	91.50	269.7	2765.07	292.70	-6791.12	0.00	6789.73	1842697.18	11888455.00	543.73
9450.00	91.50	269.7	2763.76	292.48	-6841.11	0.00	6839.71	1842647.19	11888454.78	545.04
9500.00	91.50	269.7	2762.45	292.25	-6891.09	0.00	6889.69	1842597.21	11888454.55	546.35
9550.00	91.50	269.7	2761.14	292.02	-6941.07	0.00	6939.68	1842547.23	11888454.32	547.66
9600.00	91.50	269.7	2759.83	291.80	-6991.05	0.00	6989.66	1842497.25	11888454.10	548.97
9650.00	91.50	269.7	2758.52	291.57	-7041.04	0.00	7039.64	1842447.26	11888453.87	550.28
9700.00	91.50	269.7	2757.21	291.34	-7091.02	0.00	7089.62	1842397.28	11888453.64	551.59
9750.00	91.50	269.7	2755.90	291.12	-7141.00	0.00	7139.61	1842347.30	11888453.42	552.90
9800.00	91.50	269.7	2754.60	290.89	-7190.98	0.00	7189.59	1842297.32	11888453.19	554.20
9850.00	91.50	269.7	2753.29	290.66	-7240.97	0.00	7239.57	1842247.33	11888452.96	555.51
9900.00	91.50	269.7	2751.98	290.43	-7290.95	0.00	7289.56	1842197.35	11888452.73	556.82
9950.00	91.50	269.7	2750.67	290.21	-7340.93	0.00	7339.54	1842147.37	11888452.51	558.13
*** TD (at MD = 9964.28)										
9964.28	91.50	269.7	2750.30	290.14	-7355.21	0.00	7353.81	1842133.09	11888452.44	558.51