

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) 334-6178 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
NM OIL CONSERVATION
ARTESIA DISTRICT Energy Minerals and Natural Resources

Form C-101
Revised July 18, 2013

DEC 12 2014

Oil Conservation Division

☒ **AMENDED REPORT**

RECEIVED

1220 South St. Francis Dr.

Santa Fe, NM 87505

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

1. Operator Name and Address Yates Petroleum Corporation 105 South Fourth Street Artesia, NM 88210		4. OGRID Number 025575
		3. API Number 30-015-32889
4. Property Code 37343	5. Property Name Humidor BMJ State Com	6. Well No. 1

7. Surface Location

UL - Lot A	Section 23	Township 24S	Range 27E	Lot Idn	Feet from 990	N/S Line North	Feet From 990	E/W Line East	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
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9. Pool Information

Pool Name <i>Sulphate Draw, Wolfcamp, Northwest (gas)</i>		Pool Code 85780
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Additional Well Information

11. Work Type Recomplete	12. Well Type G	13. Cable/Rotary NA	14. Lease Type S	15. Ground Level Elevation 3,185' GR
16. Multiple N	17. Proposed Depth NA	18. Formation Wolfcamp	19. Contractor NA	20. Spud Date NA
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**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Refer to Original Completion						

Casing/Cement Program: Additional Comments

Refer to page 2

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Manual BOP	3000 psi	3000 psi	Whichever company is available

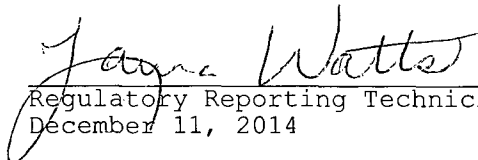
23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐ , if applicable. Signature: <i>Laura Watts</i>		OIL CONSERVATION DIVISION	
Printed name: Laura Watts		Approved By: <i>[Signature]</i>	
Title: Regulatory Reporting Technician		Title: <i>Dot H Spawen</i>	
E-mail Address: laura@yatespetroleum.com		Approved Date: <i>12/19/14</i>	Expiration Date: <i>12/19/16</i>
Date: December 11, 2014	Phone: 575-748-4272	Conditions of Approval Attached <i>Provide C-102</i>	

Proposal to Recomplete:

Yates Petroleum Corporation plans to squeeze existing Morrow and recomplete Wolfcamp as follows:

1. MIRU WSU and all safety equipment necessary. NU BOP. Release the packer at 11,876' and POOH. If not successful cut tubing as low as possible and POOH. Set a 7" packer above the tubing stub and establish an injection rate. POOH with 7" packer and TIH with a 7" retainer and set it just above the tubing stub. Squeeze the morrow perfs with 150 sacks of Class "H" cement. If a positive displacement pressure cannot be obtained over displace and re-squeeze. Test casing to 3000 psi.
2. Perforate Wolfcamp 10,860' - 11,276' (92 holes).
3. Spot 2500 gallons of double inhibited 15% HCL across the perfs. POOH with the 7" packer and tubing. MI break down the perforations while holding 1500 psi on the 2.875" X 9-5/8" annulus. The maximum allowable surface treating pressure is 8200 psi. POOH with all tools.
4. Pump a fracture treatment (treating schedule 1 attached) down the 9-5/8" casing.
5. Set a composite caged ball frac plug at 10,600' and perforate Wolfcamp 9,923' - 10,286' (111 holes)
6. Pump a fracture treatment (treating schedule 2 attached) down the 9-5/8" casing.
7. Shut the well in for 6 hours to allow the gel to break. Flow the well back until it dies.
8. Drill out composite plug and make sure perfs are not covered with sand.
9. TIH with production equipment specified by the production department.
10. Turn the well over to production.

Wellbore Schematics attached


Regulatory Reporting Technician
December 11, 2014

Treating Schedule 1

Stage Number	Stage Description	Fluid System	Rate BPM	Clean Volume gal	Slurry Volume gal	Prop Conc lb/gal	Prop Volume Stage	Prop Volume Cum	Prop Type	Stage Time
1.00	Breakdown	Slickwater	25	5,000	5,000		0	0		4.8
2.00	Acid	15% HCl	10	5,000	5,000		0	0		11.9
3.00	SLF	Slickwater	75	14,000	14,000		0	0		4.4
4.00	SLF	Slickwater	75	6,000	6,068	0.25	1,500	1,500	100 Mesh	1.9
5.00	SLF	Slickwater	75	10,000	10,228	0.50	5,000	6,500	100 Mesh	3.2
6.00	SLF	Slickwater	75	12,000	12,410	0.75	9,000	15,500	100 Mesh	3.9
7.00	SLF	Slickwater	75	12,000	12,547	1.00	12,000	27,500	100 Mesh	4.0
8.00	SLF	Slickwater	75	12,000	12,684	1.25	15,000	42,500	100 Mesh	4.0
9.00	SLF	Slickwater	75	12,000	12,821	1.50	18,000	60,500	100 Mesh	4.1
10.00	Sweep	10# Linear Gel	75	10,000	10,000	0.00	0	60,500		3.2
11.00	SLF	10# Linear Gel	75	10,000	10,114	0.25	2,500	63,000	40/70 Ottawa	3.2
12.00	SLF	10# Linear Gel	75	30,000	30,684	0.50	15,000	78,000	40/70 Ottawa	9.7
13.00	SLF	10# Linear Gel	75	40,000	41,368	0.75	30,000	108,000	40/70 Ottawa	13.1
14.00	SLF	15# Linear Gel	75	40,000	41,824	1.00	40,000	148,000	40/70 Ottawa	13.3
15.00	SLF	15# Linear Gel	75	40,000	42,280	1.25	50,000	198,000	40/70 Ottawa	13.4
16.00	SLF	15# Linear Gel	75	33,000	35,257	1.50	49,500	247,500	40/70 Ottawa	11.2
17.00	SLF	15# Linear Gel	75	30,000	32,394	1.75	52,500	300,000	40/70 Ottawa	10.3
18.00	Flush	Slickwater	75	32,105	32,105		0	300,000		10.2

Estimated Surface Treating Pressure = 4,261 psig.

Maximum Surface Treating Pressure = 5,000 psig.

Treating Schedule 2

Stage Number	Stage Description	Fluid System	Rate BPM	Clean Volume gal	Slurry Volume gal	Prop Conc lb/gal	Prop Volume Stage	Prop Volume Cum	Prop Type	Stage Time
1.00	Breakdown	Slickwater	25	5,000	5,000		0	0		4.8
2.00	Acid	15% HCl	10	4,400	4,400		0	0		10.5
3.00	SLF	Slickwater	75	12,200	12,200		0	0		3.9
4.00	SLF	Slickwater	75	5,200	5,259	0.25	1,300	1,300	100 Mesh	1.7
5.00	SLF	Slickwater	75	8,800	9,001	0.50	4,400	5,700	100 Mesh	2.9
6.00	SLF	Slickwater	75	10,500	10,859	0.75	7,875	13,575	100 Mesh	3.4
7.00	SLF	Slickwater	75	10,500	10,979	1.00	10,500	24,075	100 Mesh	3.5
8.00	SLF	Slickwater	75	10,500	11,099	1.25	13,125	37,200	100 Mesh	3.5
9.00	SLF	Slickwater	75	10,500	11,218	1.50	15,750	52,950	100 Mesh	3.6
10.00	Sweep	10# Linear Gel	75	8,800	8,800	0.00	0	52,950		2.8
11.00	SLF	10# Linear Gel	75	8,800	8,900	0.25	2,200	55,150	40/70 Ottawa	2.8
12.00	SLF	10# Linear Gel	75	26,000	26,593	0.50	13,000	68,150	40/70 Ottawa	8.4
13.00	SLF	10# Linear Gel	75	35,000	36,197	0.75	26,250	94,400	40/70 Ottawa	11.5
14.00	SLF	15# Linear Gel	75	35,000	36,596	1.00	35,000	129,400	40/70 Ottawa	11.6
15.00	SLF	15# Linear Gel	75	35,000	36,995	1.25	43,750	173,150	40/70 Ottawa	11.7
16.00	SLF	15# Linear Gel	75	28,000	29,915	1.50	42,000	215,150	40/70 Ottawa	9.5
17.00	SLF	15# Linear Gel	75	26,000	28,075	1.75	45,500	260,650	40/70 Ottawa	8.9
18.00	Flush	Slickwater	75	31,032	31,032		0	260,650		9.9

Estimated Surface Treating Pressure = 3,894 psig.

Maximum Surface Treating Pressure = 5,000 psig.

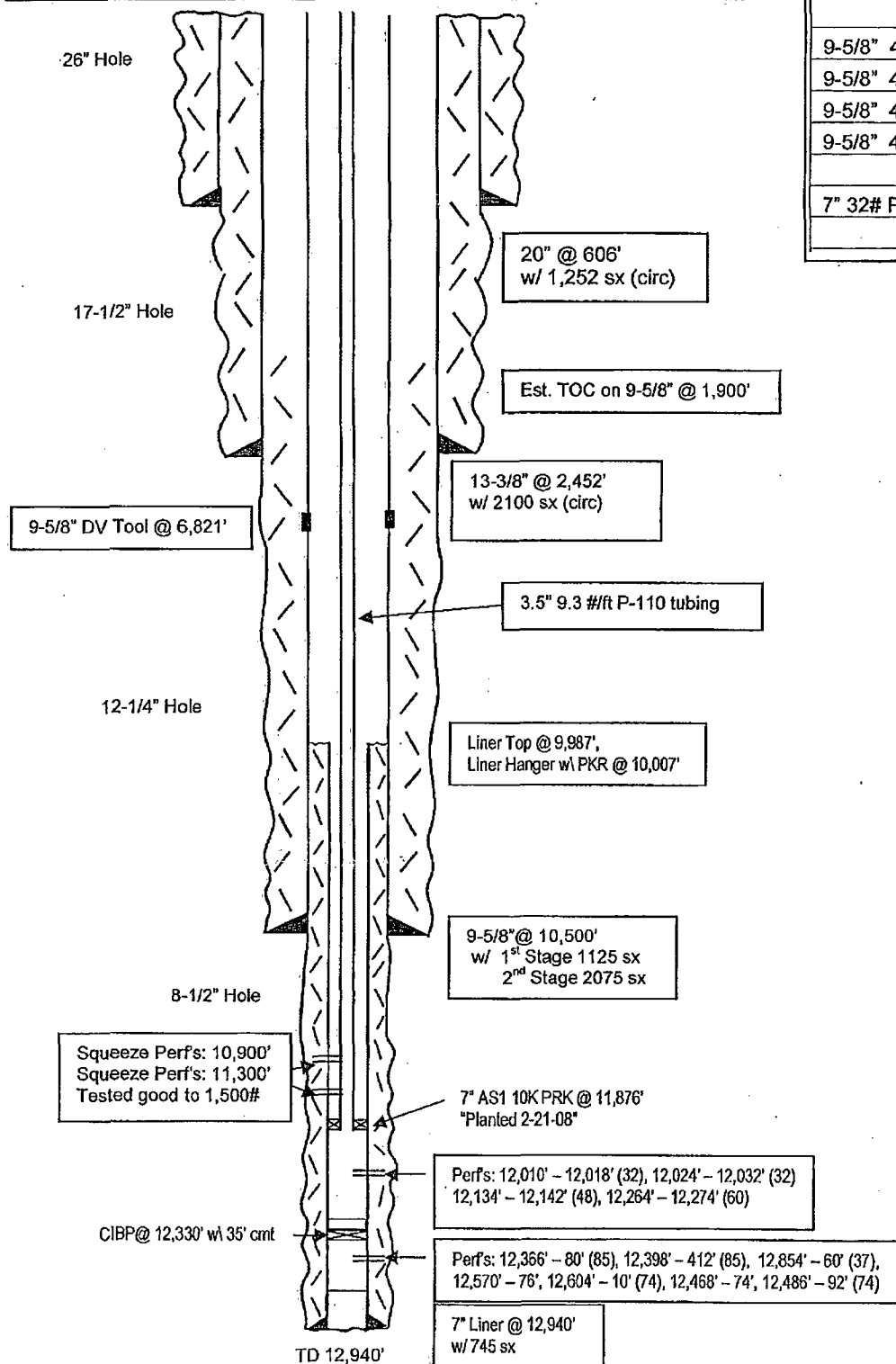
WELL NAME: Humidor State Unit No. 1 FIELD: Wildcat Morrow
 LOCATION: 990' FNL & 990' FEL Sec 23-24S-27E Eddy County New Mexico
 GL: 3,182' ZERO: KB: 3,214'
 SPUD DATE: 08/12/03 COMPLETION DATE: 11/11/03
 COMMENTS: 30-015-32889

CASING PROGRAM

20" 94# J55 ST&C	606'
13-3/8" 54.5 - 61 J55# ST&C	2452'
9-5/8" 47# P110 216'	
9-5/8" 43.5# N80 5,438'	
9-5/8" 43.5# S95 3,253'	
9-5/8" 47# P110 1,622'	10,500'
7" 32# P110 Liner Top = 9,987'	12,940'

Before

Tops:
 Wolfcamp 9,140'
 Strawn 11,314'
 Morrow 12,000'



Not to Scale
 9-30-14
 JMH

WELL NAME: Humidor State Unit No. 1

FIELD: Wildcat Morrow

LOCATION: 990' FNL & 990' FEL

Sec 23-24S-27E

Eddy County New Mexico

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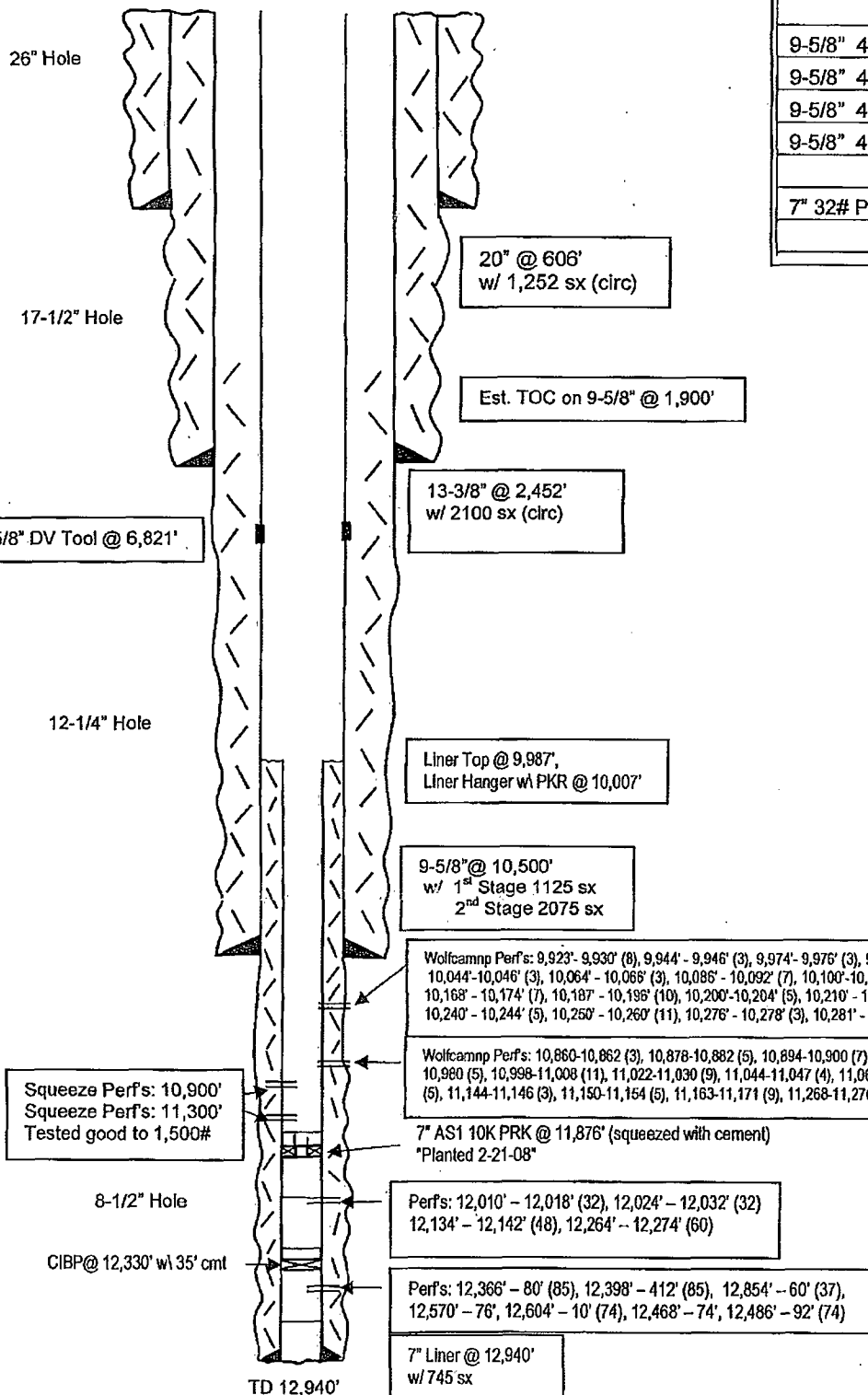
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7" 32# P110 Liner Top = 9,987'	12,940'

After

Tops:

Wolfcamp	9,140'
Strawn	11,314'
Morrow	12,000'



Not to Scale

11-18-14
JMH