

DATE IN <u>9.14.10</u>	SUSPENSE	ENGINEER <u>WJ</u>	LOGGED IN <u>9.14.10</u>	TYPE <u>DHC</u>	APP NO. <u>1025749715</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



FASTEN
RECEIVED OOD

2010 Feb 2nd 12:07 PM #4

ADMINISTRATIVE APPLICATION CHECKLIST 30-025-39809

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

4320

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Kim Tyson
 Print or Type Name

Kim Tyson
 Signature

Regulatory Analyst
 Title

9-8-2010
 Date

kimt@for1.com
 e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Bravo Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

Oil Conservation Division

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION TYPE

☒ Single Well

☐ Establish Pre-Approved Pools

EXISTING WELLBORE

☐ Yes ☒ No

APPLICATION FOR DOWNHOLE COMMINGLING

Fasken Oil and Ranch, Ltd. 303 W. Wall St., Ste. 1800, Midland, TX 79701

Operator Address
Federal "26A" 4 I, Sec. 26, T18S, R33E Lea
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 151416 Property Code API No 30-025-39809 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Corbin, Queen, South (Oil)		EK; Delaware
Pool Code	13920		21655
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	4562' - 4576' Perforated		5118' - 5690' Perforated
Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	Not Required		Not Required
Oil Gravity or Gas BTU (Degree API or Gas BTU)	37° API		38° API
Producing, Shut-In or New Zone	New Zone		New Zone
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: No History Rates:	Date: Rates:	Date: No History Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas 20 % 25 %	Oil Gas % %	Oil Gas 80 % 75 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No ☐
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☐ No ☐

Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐

Will commingling decrease the value of production? Yes ☐ No ☒

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes ☒ No ☐

NMOCD Reference Case No. applicable to this well: _____

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Kim Tyson TITLE Regulatory Analyst DATE 9-8-2010

TYPE OR PRINT NAME Kim Tyson TELEPHONE NO. (432) 687-1777

E-MAIL ADDRESS kimt@forl.com

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

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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 July 16, 2010

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-39809		² Pool Code 13920	³ Pool Name Corbin; Queen, South (Oil)
⁴ Property Code	⁵ Property Name Federal "26A"		⁶ Well Number 4
⁷ OGRID No. 151416	⁸ Operator Name Fasken Oil and Ranch, Ltd.		⁹ Elevation 3827' GL

¹⁰ Surface Location

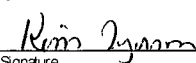
UL or lot no.	Section	Township	Range	Lot 1 dn	Feet from the	North/South line	Feet from the	East/West line	County
I	26	18S	33E		1525'	South	300'	East	Lea

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1 dn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

16				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.  Signature 9-8-2010 Date Kim Tyson Printed Name kimt@forl.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. Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

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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 July 16, 2010

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-39809	² Pool Code 21655	³ Pool Name EK; Delaware
⁴ Property Code	⁵ Property Name Federal "26A"	⁶ Well Number 4
⁷ OGRID-No. 151416	⁸ Operator Name Fasken Oil and Ranch, Ltd.	⁹ Elevation 3827' GL

¹⁰ Surface Location

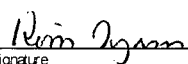
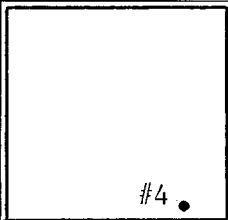
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	26	18S	33E		1525'	South	300'	East	Lea

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

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

16				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.  9-8-2010 Signature Date Kim Tyson Printed Name kimt@for1.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. Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

Fasken Oil and Ranch, Ltd.

Federal 26 "A" No. 4

Application for Downhole Commingling

Additional Data

Since the Federal 26 "A" No. 4 has yet to be completed, there is no production data available for either the Delaware or Queen intervals in this well. However, predicted production curves were generated using production data from correlative offset wells. Furthermore, log calculations were performed and compared to the other wells within the area to help in predicting the expected production rates and ultimate recoveries.

Based on the information stated above, the production allocation for the Delaware and Bone Springs should be as follows:

EK Delaware	72 bopd	80%	62 mcfpd	75%
EK Queen	17 bopd	20%	20 mcfpd	25%

All working, royalty and overriding interests in this well are common and therefore, no notice is required.

FASKEN OIL & RANCH, LTD.

Federal "26-A" No. 4

Well Data			
Surface Temp	90	°F	
Max BHT	104	°F	
Loggers TD	5,992	ft	
Temp Gradient	0.00233645	°F/ft	

Sandstone Pay Parameters			
	Queen	Delaware	
S _w <	0.55	0.6	
GR <	70	70	
Φ >	0.1	0.1	
PEF <	3	3	
R _w =	0.045	0.045	

Zone	Depth	Depth to	X-plot	Φ	Sw	Pay, h	BVW	Φh	hcf Φ ^h *(1-sw)	Temp °F	B _o (rb/stb)	Recovery Factor	Acres	EUR MBO
Queen														
Penrose	4550.00	4630.00	14.54%		44.94%	13	0.0653	1.8900	1.0406	101	1.25	0.15	20	19.38
Total Queen:			14.54%		44.94%	13	0.0653	1.8900	1.0406					19.38
DELAWARE														
Bell Canyon Dolomite	5100.00	5500.00	7.34%		20.61%	22.5	0.0151	1.6505	1.3103	102	1.25	0.15	20	24.40
Bell Canyon Sand	5250.00	5400.00	15.67%		44.36%	13.0	0.0695	2.0375	1.1338	102	1.25	0.15	20	21.11
Cherry Canyon	5590.00	5710.00	12.82%		44.34%	73.5	0.0568	9.4195	5.2431	103	1.25	0.15	20	97.62
Total Delaware:			12.03%		41.35%	109	0.0497	13.1075	7.6872					143.13
TOTAL OIL														
			12.29%		41.80%	122.0	0.05139034	14.9975	8.7279					169.12

Rate/Time Graph

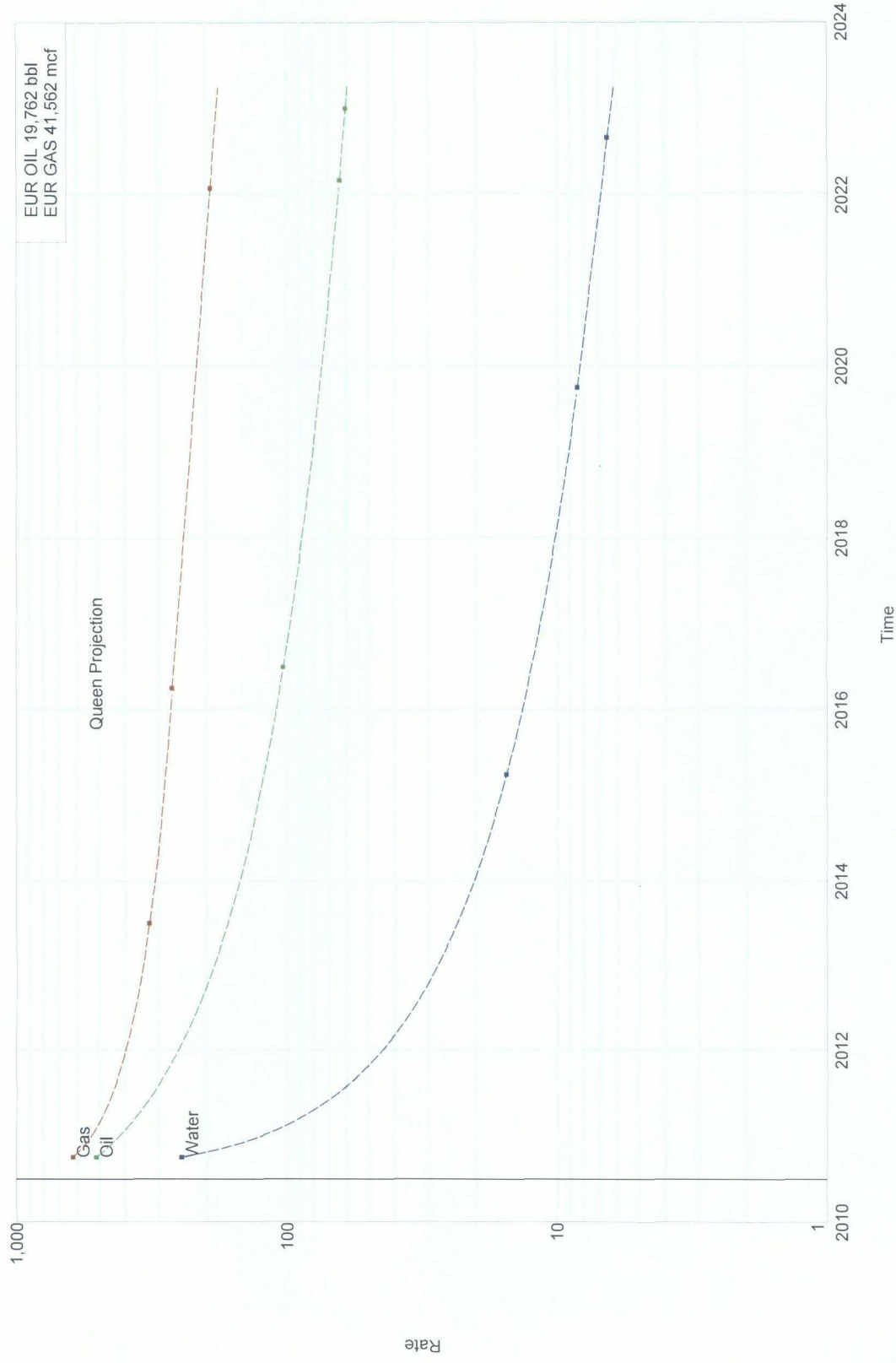
Lease Name: FEDERAL 26 A (4)
County, ST: LEA, NM
Location: 26N 18S 33E SE SW

Project: j:\piapps\dwights\ptools\90\projects\cs\lfederal 26 a 3.mdb

Operator: FASKEN OIL AND RANCH LTD
Field Name: CORBIN SOUTH

Date: 9/1/2010
Time: 9:57 AM

FEDERAL 26 A - CORBIN SOUTH



Rate/Time Graph

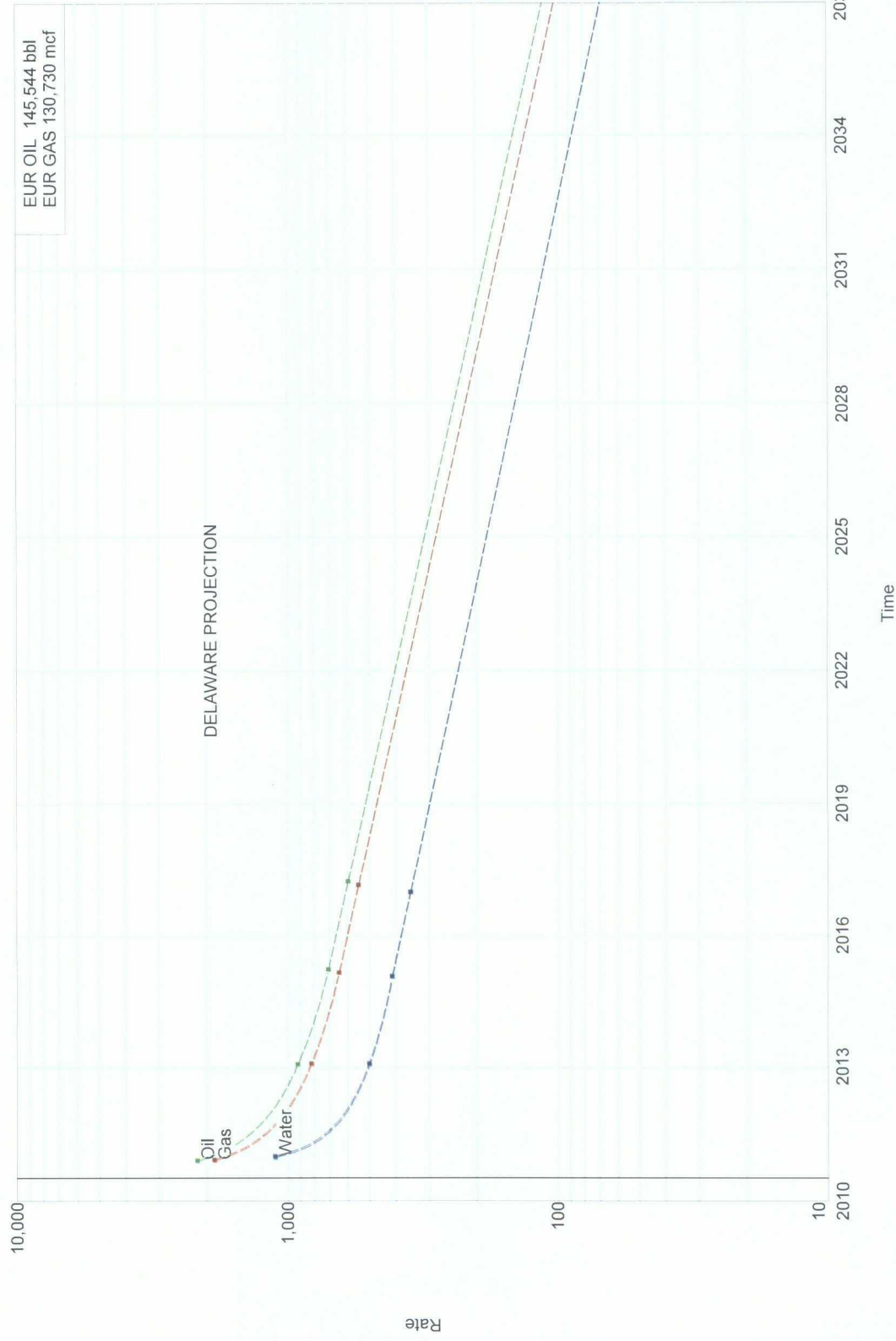
Date: 9/1/2010
Time: 9:41 AM

Project: j:\piapps\dwights\ptools90\projects\cs\lfederal 26 a 3.mdb

Lease Name: FEDERAL 26 A - DELAWARE PROJECTION (POST DRILLING) (4)
County, ST: LEA, NM
Location: 26H 18S 33E SE NE

Operator: FASKEN OIL & RANCH, LTD.
Field Name: E-K

FEDERAL 26 A - DELAWARE PROJECTION (POST DRILLING) - E-K



Rate/Time Graph

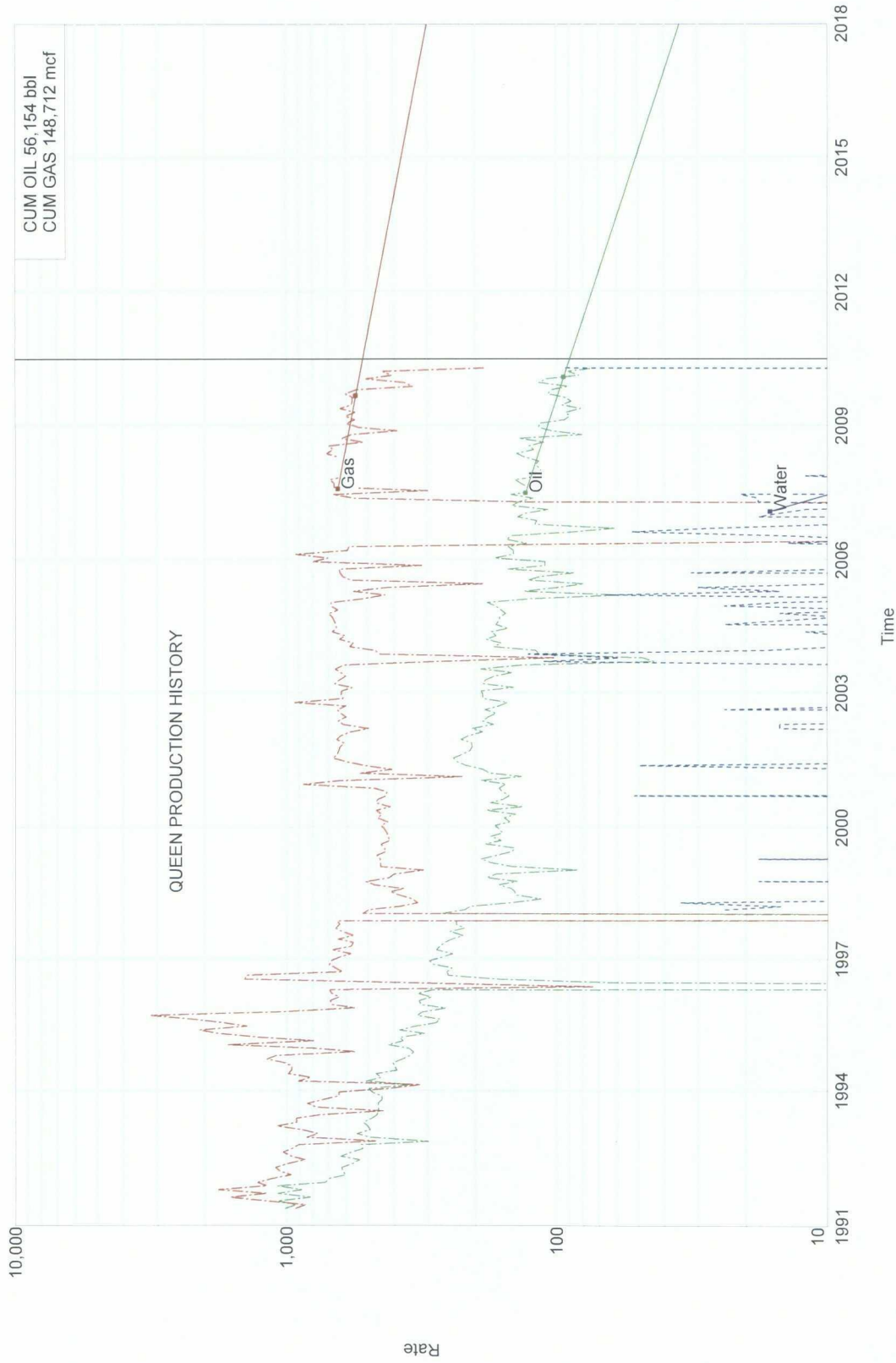
Lease Name: FEDERAL 26 A (1)
County, ST: LEA, NM
Location: 26N 18S 33E SE SW

Project: j:\piapps\dwrights\ptools90\projects\csllfederal 26 a 3.mdb

Operator: FASKEN OIL AND RANCH LTD
Field Name: CORBIN SOUTH

Date: 8/9/2010
Time: 3:35 PM

FEDERAL 26 A - CORBIN SOUTH



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS
**Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.
NM - 26692

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Fasken Oil and Ranch, Ltd.

3a. Address
303 West Wall St., Suite 1800, Midland, TX 79701

3b. Phone No. (include area code)
432-687-1777

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1525' FSL & 300' FEL, Sec. 26, T18S, R33E

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.
Federal "26A" No. 4

9. API Well No.
30-025-39809

10. Field and Pool or Exploratory Area
EK; Delaware

11. Country or Parish, State
Lea, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Downhole
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Commingle
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Fasken Oil and Ranch, Ltd. proposes to downhole commingle the EK; Delaware at a depth of 5118' - 5690' and the Corbin; Queen, South (Oil) at a depth of 4562' - 4576' in the Federal "26A" No. 4 well. Production will be allocated as per what is on the downhole commingling application.

Please see attached downhole commingling application.

14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)

Kim Tyson

Title Regulatory Analyst

Signature

Kim Tyson

Date 09/08/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Recommended Completion Procedure
Federal 26 A No. 4
1525' FSL & 300' FEL
Sec 26, T-18-S, Range 33-E
API #30-025-39809
A.F.E. 1800

OBJECTIVE:	Original Completion	
WELL DATA:		
8-5/8" 24# J-55:	Set at 1644.60' w/800 sx, circ 144 sx cement	
5-1/2" 15.5# J-55 LT&C casing:	Set at 5988.39', DV Tool @ 3373.80', 1 st stage cmt w/550 sx, cir. 98sx.; 2 nd stage cmt w/725 sx – circ 72sx	
KB:	14'	
TD:	6000'	
PBTD:	DV	

1. Level location and install mast anchors.
2. Set test tank and build flowline from wellhead to test tank. Remove wing valves from casings and install XXH nipples and 3000 psi ball valves.
3. Pipe all casings to surface and wrap with wax as needed. Wrap casings and nipples with 4" pipe wrap tape and pipe to surface. Back fill cellar with pea gravel. Set pipe racks and take delivery of ~6,000' 2-3/8" EUE 8rd N-80 tubing, 3k manual BOP, and 2-3/8" flow tree. Clean boxes and pins and tally tubing.
4. RUPU, tighten bolts on wellhead flange and test casing to 2000 psi for 20 minutes. ND flange and NU BOP.
5. RIW w/ 4-3/4" bit, 1 3-1/2" drill collar, 5-1/2" casing scraper, 5- 3-1/2" drill collars and 2-3/8" tubing to DV tool at 3373.80'.
6. RU reverse unit with power swivel and drill out cement and DV tool with 2% KCl water. Reciprocate casing scraper through DV +/-10 times until no drag is felt. Circulate wellbore clean.
7. Test casing and DV tool to 2,000 psi for 15 minutes. Continue RIW w/ bit and tbg, and tag PBTD at +/- 5940.08'. Cleanout if necessary.
8. RU acid pump truck and pickle 500 gallons 15% HCl double inhibited acid down tubing and a little bit around backside at 1/2 to 1 bpm.
9. RU on tubing/casing annulus and reverse acid to pit at 1 to 1-1/2 bpm.
10. Circulate and displace well with 2% KCl water.
11. POW leaving bit @ 5700'. Spot 500 gallons 7-1/2% HCl acid @ 5700'.
12. POW while standing tubing in derrick & lay down bit and collars. RD reverse unit.
13. ND BOP and NU 5k frac valve with 4 outlet goat head with stage tool casing saver and 5-1/2" HP WL adaptor flange on top. Test frac valve, stage tool, and casing to 3,850 psi for 15".
14. RUWL and run GR-CCL correlation log +/-5940' to 50' above DV tool at +/-3323'. RIW with 3-1/8" expendable slick casing gun with 5K full lubricator and perforate Delaware Cherry Canyon as follows:

**5641'-5690' (50h) & 5614'-5634' (21 h) w/ 1 JSPF, 60 degree phased,
0.40" EH, 71h total**

Total - 71 holes. All Perforations should be correlated to Baker Hughes Compensated Z-Densilog, Compensated Neutron Log, Spectralog, Gamma Ray Log dated 8-25-2010. POW w/ WL, make sure all shots fired. Leave WL truck spotted for stage frac job on 9/29/10 unless job is finished before the frac date.

15. RU pump truck on casing and displace spot acid into perforations using 12 bbls of 2% KCl water at 3,000 psi maximum pressure. Record ISIP, 5", 10", & 15" shut-in pressures. Report results to Midland Office.
16. Set 8-500 bbl clean frac tanks. Fill each to maximum capacity with 2% powdered KCl water. Get a water sample to Superior representative to check for compatibility. Also add 3 lbs of biocide to each frac tank before frac job.
17. **FRAC DATE SEPTEMBER 29th.** RU Superior Pumping Services and E&P Wireline. Frac the Cherry Canyon and Penrose formations in two stages according to "Federal_26A_4_FracProcedure.xls".attached. Max pressure 3,850 psi.
18. After frac on lower zone, RUWL and RIW and set 5-1/2" Weatherford composite plug at +/- 5380' at least 10' away from casing collar. Perforate Bell Canyon 2 JSPF @

5325'-34' (18 h), 5238'-45' (14 h), 5207'-12' (10 h), & 5123'-26' (6 h)

Use 3-1/8" slick casing gun, 60 phased, 48 holes total. POW and make sure all shots fired and leave WL mast RU.

19. After fracing Bell Canyon according to proposal. RIW and set Weatherford 6k RBP @ 4620' at least 10' away from a casing collar. Perforate Penrose 2 JSPF @

4562'-76' (28h)

Use 3-1/8" slick casing gun, 60 phased, 28 holes total. POW and make sure all shots fired and leave WL and mast RU to set capping plug after last stage.

20. After fracing the Penrose, RIW and set 5-1/2" Weatherford 6K composite bridge plug at +/- 4000' at least 10' from collar. Set plug and bled off pressure from 5-1/2" casing and make sure plug is holding. RD wireline truck.
21. NU BIW stripper rubber and RU reverse unit and RIW w/ 4-3/4" hurricane mill, sliding sleeve bit sub (Calvin has this sub) , seating nipple, and tubing to top of composite plug at +/- 4000'. RU XH flowback manifold with double chokes and flowback iron with plug catcher on inlet side of manifold, and lay line to reverse pit, and test tank.
22. Drill out composite bridge plugs at 4000', 4620', & 5380'. Circulate well clean after each plug and check for sand entry while circulating. Continue RIW and clean out to PBTD 5940' and circulate well clean. **Note flow rate and pressure after drilling each plug and report on daily drilling reports.**
23. POW with tubing and LD BHA.
24. RIW with 5-1/2" Arrowset packer, sn, and 2-3/8" tubing and set packer @ +/- 4350'. Swab well to flowback tank, evaluating hourly fluid entry rates and oil cuts. Report results to Midland office for assistance in artificial lift design.

25. Once well has cleaned up enough to run artificial lift equipment, release packer and POW. RIW with production tubing and rod string according to design to follow.
26. Space out rods and leave rods stacked out on stuffing box.
27. Set pumping unit and run electrical service to unit.
28. Clean and level location.
29. Report daily well test to Midland office on drilling reports.

Casing Detail: 5-1/2" 15.5# J-55 LT&C casing

		@
1 Weatherford float shoe	1.30'	
1 shoe joint	46.11'	
1 Weatherford float collar	0.90'	5940.08'
8 joints Flint coated casing	337.40'	5602.68'
11 joints casing	489.38'	5113.30'
1 jt. marker	11.63'	5101.67'
15 joints casing	674.19'	4427.48'
1 joint marker	20.60'	4406.88'
23 joints casing	1031.01'	3375.87
1 Weatherford DV tool	2.07'	3373.80
<u>75 jts. casing</u>	<u>3379.30'</u>	
135 jts. total	5993.89'	
less cut-off	- 17.50'	
total pipe	5976.39'	
below KB	+ 12.00'	
landed @	5988.39'	

Cement Detail:

1st Stage: 10 bfw, 500 gallons Mud Flush, 10 bfw, 550 sx Starbond H with 0.6% C-12, 0.25% C-45, 3 lbs/sx Gilsonite, 0.25% R-38, and 3% salt (s.w. 13.2 ppg, yield 1.60 ft³/sx). PD at 6:00 pm CDT 8-26-10. Pressured up to 1900 psi, opened DV tool and circulated 98 sx cement to bins.

2nd Stage: 20 bfw, 525 sx Lite "C" with 6% gel, 1/4# celloflake, 0.25% R-38, and 5% salt (s.w. 12.4 ppg, yield 2.10 ft³/sx) plus 200 sx class "C" with 2% Calcium Chloride and 0.25% R-38 (s.w. 14.8 ppg, yield 1.35 ft³/sx). Plug down 2:30 am CDT 8-14-10, differential pressure 1020 psi. Circulated 72 sx cement to bins. Dropped bomb and closed DV tool.