UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Carlsbad Field Off SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter and CD Artesian

	FORM	A AI	PR(OVED
	OMB	NO.	1004	4-013
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abandoned we	II. Use form 3160-3 (AP	D) for such	proposals.		ODE Chan, Minute	n tribe Name		
SUBMIT IN TRIPLICATE - Other instructions on reverse side.					7. If Unit or CA/Agre	7. If Unit or CA/Agreement, Name and/or No.		
I. Type of Well		8, Well Name and No. AVALON FEDERAL 1						
Oil Well 💆 Gas Well 🔲 Off								
2. Name of Operator FASKEN OIL & RANCH LIMIT		9. API Well No. 30-015-21814-00-S1						
3a. Address 6101 HOLIDAY HILL ROAD MIDLAND, TX 79707	3b. Phone No Ph: 432-66	o. (include area code) 87 ₇ 1777	ı		10. Field and Pool, or Exploratory BURTON FLAT			
4. Location of Well (Footage, Sec., T			11. County or Parish, and State					
Sec 1 T21S R26E SESE 803F			EDDY COUNTY	EDDY COUNTY, NM				
12. CHECK APPI	ROPRIATE BOX(ES) TO	O INDICATE	E NATURE OF N	OTICE,	REPORT, OR OTHE	R DATA		
TYPE OF SUBMISSION			TYPE OF	ACTION				
Notice of Intent	☐ Acidize	☐ Dec	pen	☐ Prod	uction (Start/Resume)	☐ Water Sl	hut-Off	
	☐ Alter Casing	- 🔲 Fra	cture Treat	□ Recla	nmation	☐ Well Into	eg r ity	
☐ Subsequent Report	☐ Casing Repair	□ Nev	v Construction	🛭 Reco	mplete	Other		
☐ Final Abandonment Notice	☐ Change Plans ☐ Plu		g and Abandon	☐ Temporarily Abandon				
	☐ Convert to Injection	Plug	g Back	□ Wate	r 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 recomplete 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 shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.) **NM OIL CONSERVATION** ARTESIA DISTRICT** Morrow zone to the Burton Flat; Strawn, West pool. Please see attached procedure and current and								
proposed wellbore diagrams.	., 0, 11001 pool. 1 12					JAN 2 5 2016		
A closed loop system will be used for the recompletion operations. A sundry notice has been submitted to the NMOCD for approval. SEE ATTACHED FOR RECEIVED								
	Submit C10.	/	(CONE	OITIONS OF A	APPROV	/AL	
14. 11		0/16	· · · · · · · · · · · · · · · · · · ·					
14. I hereby certify that the foregoing is Comm	Electronic Submission #	IL & RANCH L	MIŤED, sent to th	e Cartsba	d ,			
Name(Printed/Typed) ADDISON LONG			Title REGULA	ATORY A	NALYSTICUVLU	$\overline{-}$		
Signature (Electronic S	ubmission)		Date 10/19/20	5	1/5 2016			
	THIS SPACE FO	R FEDERA	L OR STATE (OFFICE	use		·	
Approved By	-		Title	RI	REAL OF LIND MANAGE	ICE Date		

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.

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

NM OIL CONSERVATION ARTESIA DISTRICT

Recommended Recompletion Procedure
Avalon Federal No. 1
350' FEL & 803' FSL
Sec 1, T21S, R26E
Eddy County, New Mexico

AFE 3307

JAN 2 5 2016

RECEIVED

OBJECTIVE: Treat Morrow and test. If Morrow uneconomic, recomplete to Strawn.

API: 30-15-21814

Completed: Rig released about 6-28-76, Completed 7-6-76

WELL DATA:

13-3/8" 48#/ft H-40 casing: "Set at 500' KB Cmt 230sx low density+150sx "C". Circ 35 sx to

surf.

9-5/8" 32#H40: 36#K55 casing: Set at 2560' KB, Cmt 150sx Folse set+250sx low density+200sx

"C", 1" w/330sx "C". Circ 5 sx to surf.

\$5-1/2" 15.5#, 17#1.6#, N-80&K55 casing

\$ (15:5# K55 1696'-5560'): Set at 11,361' KB, Cmt 300 50/50 Poz 2% gel (14.2ppg)+350 sx "H"

w/silica flour (15.7ppg). TOC 8750 by CBL.

Perfs: Morrow (Active): 11046:52, 11028-32, 1006-42, 10988-98, 10976-

86, 10842-76, 10724-30, 10715-22. Total +/-360 holes.

Morrow (Inactive, Sqzd 1/97): 11120-66, 10642-57, 1028-30, 10585-

· 96, 10545-56 · · ·

Atoka (Inactive, Sozd 1/97): 10416-25, total 36 holes.

Tubing: 2-7/8" SN (0.30'), +/-347 its 2-7/8 EUE 8rd 6.5#/ft N-80 tbg

(11,016'), EOT 11,027.3' KB.

TD: 11,450

PBTD: 11,102 cmt retainer. (FC @ 11,279)

Last Tubing Pull: 2-2-97

Current status: Flowing 20 mcfd from Morrow 10,715-11,052

- 1. Treat Morrow perfs 10,715'-11,052' via with Gas Plus surface tension reducer, 50/50 mixture of 7.5% HCL acid and methanol. Shut well in overnight.
- Open well to sales. Flow and swab (if needed) back load and flow test.
- 3. If Morrow flow rate is uneconomic (less than 70 mcfd), then proceed to recomplete to the Strawn.

Recomplete to Strawn

- 4. Test mast anchors.
- 5. Set test tank and lay flowline.
- RUPU. Set matting board, pipe racks.
- 7. Blow down casing pressure.
- 8. RU pump truck and pump via tubing 35 bbls 3% KCL w/ clay stabilizer, corrosion inhibitor and oxygen scavenger.
- 9. NDWH, NU BOP.
- 10. POW with tubing with Scanalog inspection procedure, total +/-11016' 2-7/8" 6.5#/ft EUE 8rd N-80 tubing and SN.
- 11. RUWL lubricator and RIW w/ 4.75" gauge ring to 10,665' and set 5-1/2" 17# CIBP at +/-10,665' (maximum 50' above perfs). RDWL.
- 12. RIW with notched collar, SN, 2-7/8 EUE 8rd 6.5#/ft N-80 tubing to 10,665' and lightly tag CIBP.

- 13. RU pump truck and reverse circulate well with 3% Kcl water containing packer fluid and clay stabilizer. Test casing and plug to 500 psi.
- 14. RU cementers spotting 31 sx (250') class "H" cement (1.07 cuft/sk yield) above CIBP 10,665' in 5-1/2" 17#/ft csg (0.1305 cuft/ft) for a PBTD of 10,415'. WOC 2 hours and tag plug at 10,415'.
- 15. POW laying down 2-7/8" tubing.
- 16. Receive 10,000' 2-3/8" 4.7#/ft N80 EUE 8rd tubing with AB modified couplings (cost is \$4.72/ft less \$4.30/ft for all 2-7/8" yellow band determined with Scanalog).
- 17. Change out BOP rams to 2-3/8".
- 18. RIW with 2-3/8" wireline entry guide, 4' x2-3/8" EUE 8rd N-80 tubing sub, Arrowset IX 10k packer, TOSSD with 1.781" "F" profile nipple, picking up 2-3/8" EUE 8rd N-80 tubing to +/- 9870'.
- 19. RU pumping service and pickle tubing with 500 gal 15% HCL acid. Reverse load water to test tank.
- 20. ND BOP. NUWH for 2-3/8" tubing, setting packer in 12 points compression.
- 21. RU pump truck and conduct MIT test to the maximum casing treating pressure per BLM stipulations. Test casing to **1200 (NOTE: preliminary assumption of BLM stips)** psi (25% of 5-1/2" 15.50#/ft K55 burst 4810 psi) with chart recorder. Report results to BLM.
- 22. RUWL with 3000 psi lubricator and grease. Perforate **Strawn limestone** with 1-11/16" strip gun as follows:

9,944' - 62' (17h, 1JSPF) 10,012' - 18' (7h, 1JSPF) 10,056' - 66' (11h, 1JSPF) 10,122' - 46' (25h, 1JSPF)

60 total holes by Schlumberger Cement Bond Log dated 7-1-76 (Corrected collars are corrected to the Dresser Atlas Compensated Densilog/Compensated Neutron Log dated 6-26-76). POW, make sure all shots fired, and RDWL.

- 23. RU pumping service. Install tree saver. Trap 1200 psi on annulus. Acidize Strawn perfs 9944'-10146' (56', 60 holes, 0.21" EHD) via 2-3/8" tubing with 2500 gal (45 gal/ft) 15% NEFE HCl containing 1 gpt Cl-22, 2 gpt NE-940, 2 gpt Inflo-150, 6 gpt F-270, 2 gpt FE-271 (recipe by formerly BJ Services). Flush with 40 bbls. 2% KCL water and drop 110 1.3 sp. gr. ball sealers for diversion (pump 5 bbls of acid and then drop 2 balls/bbl of acid thereafter). Rate 5-10 bpm at max pressure 5000 psi. RD stimulation company and tree saver.
- 24. Swab and flow back acid and load water to steel test tank and evaluate.
- 25. RDPU.
- 26. Return well to sales.

CWB M:\Common\WELLFILE\A\Avalon 1 Fed	deral No 1\Engineering\AvalonFed1 AFE	3307 pro Recompl Strwn 10-7-15.doc
SRF	CWB_10-15-15	JWD

Avalon Federal No. 1

Current 2-2-97 Tops Operator Fasken Oil and Ranch, Ltd. GL: 3211.79' Location: 803' FSL and 350' FEL KB: 3228' Sec 1, T21S, R26E ∰113-3/8" 48# H-40 @ 500' Eddy County, NM Circ 35 sx, TOC surf. Compl.: 7/6/1976 API#: 30-015-21814 TD: 11.450' 95/8" 36# K55 Surf-860' PBTD: 11.242' (FC 11279') 9-5/8" 32# H40 860'-2560' 13-3/8" 48# H-40 @ 500' Casing: 9-5/8" 32# H40,36# K55 @ 2560" Circ 5sx, TOC surf. w/230sx low den cmt, 1/4#/sk celleflake, 5lb/sk Gilsonite, 2% Cacl2'+150sx "C", Circ 35 sx, TOC surf. Circ 35 sx, TOC surf. 9-5/8" 32# H40,36# K55 @ 2560' Casing Detail: 5-1/2" 17# N80 Surf-429' w/150sx Folse w/2%Cacl2+250 sx low den cmt w/5 lb/sk Gilsonite, 5-1/2" 17# K55 429'-1696' 1/4#/sk flocele+200 sx "C" 2% CaCl2 w/no returns+1" 8 times w/330 sx; TOC surf, circ 5sx 5-1/2" 15.5# K55 1696'-5560' 2nd Bone Spr sd 6866' 5-1/2" 17# K55 5560'-7603' 5-1/2" 15.5,17&20# K55&N-80 @ 11,361 w/300 sx 50/50 Pox, 2%gel, 0.59 D31, 0.69 D19, 2% R5 (14.2 ppg) 5-1/2" 17# N80 7603'-10737' +350 sx "H" w/35% Silica flour,5% D31m0,6%D19,0.2%R5 (15.7ppg). 5-1/2" 20# N80 10737'-11361' TOC 8750' by CBL. Tubing: Asof 2-2-97 2-7/8" SN AJL: 0.30 31.5 +/-347 its 2-7/8" 6.5# EUE 8rd N-80 tbg 11016.00 11016.30 Below KB 11.00 EOT 11027.30 3rd Bone Spr sd 8250' Wolfcamp 8603' TOC 8750' by CBL. Cisco 9,594' Perfs: 10/2/93 10416-25 (4spf) Sqzd 1/97 Perfs: **Morrow** Canyon 9,743' 12/6/96 10545-56 Sqzd 1/97 12/6/96 10585-96 Sqzd 1/97 Strawn 9,924' 12/6/96 10628-30 Sqzd 1/97 12/6/96 10642-57 Sqzd 1/97 Sqzd Atoka & U. Morrow 10715-22 Active Atoka 10,256' 10416-10657' 10724-30 (4spf) Active 10/2/93 9/6/77 10842-76 (reprf '78) Active **Active Morrow** Morrow Lime 10446' 10976-86 (4spf) Active 1/26/78 10715'-11052' 1/26/78 10988-98 (4spf) Active 9/6/77 11006-42 (reprf '78) Active Morrow B 10,896' 11027.3 EOT 7/6/76 11028-32 (8h) Active 7/6/76 11046-52 (12h)(reprf '78) Active E Cmt Rei 11102' 6-28-93 7/6/76 11120-66 (92h)(reprf '78) Sqzd 1/97 11120-66 (92h)(reprf '78), Sqzd 1/97 Barnett 10,874' Hole Sz 17-1/2" 346',12-1/4" 4260',7-7/8" 11,015' 囊 PBTD: 11,242' (FC 11279') Status: Oct 2015 Morrow producer 5-1/2" 15.5,17&20# K55&N-80 @ 11,361' 11,450

cwb 9-4-14 Avalon1Fed1_WBD.xls

Avalon Federal No. 1 Proposed 10-6-15 Tops Operator Fasken Oil and Ranch, Ltd. GL: 3211.79' Location: 803' FSL and 350' FEL KB: 3228' Sec 1, T21S, R26E 113-3/8" 48# H-40 @ 500' Eddy County, NM Circ 35 sx, TOC surf. Compl.: 7/6/1976 API#: 30-015-21814 TD: 11,450' 95/8" 36# K55 Surf-860" PBTD: 11,242' (FC 11279') 9-5/8" 32# H40 860'-2560' Casing: 13-3/8" 48# H-40 @ 500' 9-5/8" 32# H40,36# K55 @ 2560" w/230sx low den cmt, 1/4#/sk celleflake, 5lb/sk Gilsonite, Circ 5sx, TOC surf. 2% Cacl2'+150sx "C", Circ 35 sx, TOC surf. Circ 35 sx, TOC surf. 9-5/8" 32# H40,36# K55 @ 2560' Casing Detail: w/150sx Folse w/2%Cacl2+250 sx low den cmt w/5 lb/sk Gilsonite, 5-1/2" 17# N80 Surf-429' 1/4#/sk flocele+200 sx "C" 2% CaCl2 w/no returns+1" 8 times 5-1/2" 17# K55 429'-1696' w/330 sx. TOC surf. circ 5sx 2nd Bone Spr sd 6866' 5-1/2" 15.5# K55 1696'-5560' 5-1/2" 15.5,17&20# K55&N-80 @ 11,361" 5-1/2" 17# K55 5560'-7603' w/300 sx 50/50 Pox, 2%gel, 0.59 D31, 0.69 D19, 2% R5 (14.2 ppg) 5-1/2" 17# N80 7603'-10737' +350 sx "H" w/35% Silica flour,5% D31m0,6%D19,0.2%R5 (15.7ppg). 5-1/2" 20# N80 10737'-11361' TOC 8750' by CBL. Prop Tbg WL entry guide on 4' 2-3/8" fbrgls sub 5-1/2" 15.5# K55 - yield 4810 psi 4.30 SS TOSSD w/1.781" X PN AJL: 0.70 31.5' 5-1/2" Arrowset 10K pkr w/TOSSD 1.781" I 6.50 +/-313its 2-3/8" 4.7# EUE 8rd N-80 tbg 9859.50 Below KB 11.00 EOT 9870.50 3rd Bone Spr sd 8250* Proposed Strawn Wolfcamp 8603' TOC 8750' by CBL. 9944'-62' 1jspf, 19h 10012'-18' 1jspf, 7h 10056'-66' 1jspf, 11h Cisco 9,594' 10122'-46' 1jspf, 25 Perfs: Atoka 10/2/93 10416-25 (4spf) Sqzd 1/97 Canyon 9,743' EOT 9870.5 Perfs: **Morrow** 12/6/96 10545-56 Sqzd 1/97 Strawn 9,924' 12/6/96 10585-96 Sqzd 1/97 Proposed Strawn 9944'-10146' 12/6/96 10628-30 Sqzd 1/97 12/6/96 10642-57 Sqzd 1/97 Atoka 10,256* 10715-22 Active 10416'-10657' Atk&U Mor Sqzd 10/2/93 Active Morrow Lime 10446' 10724-30 (4spf) 9/6/77 10842-76 (reprf '78) Active CIBP 10665' w/250' cmt 10976-86 (4spf) Active 1/26/78 1/26/78 10988-98 (4spf) Active Morrow Clas 10883' 9/6/77 11006-42 (reprf '78) Active Morrow B 10,896' 10715'-11052' Morrow 7/6/76 11028-32 (8h) Active 7/6/76 11046-52 (12h)(reprf '78) Active 7/6/76 11120-66 (92h)(reprf '78) Sqzd 1/97 器ICmt Rel 11102' 6-28-93 11120-66 (92h)(reprf '78), Sqzd 1/97 Barnett 10,874' Hole Sz 17-1/2" 500',12-1/4" 2560',8-3/4" 11,450' 蜒 PBTD: 11,242' (FC 11279') Status: Oct 2015 Morrow producer 5-1/2" 15.5,17&20# K55&N-80 @ 11,361' 11,450

9-4-14

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Avalon Federal 1 30-015-21814-00-S1 Fasken Oil and Ranch, Ltd. January 15, 2016 Conditions of Approval

Notify BLM at 575-361-2822 a minimum of 24 hours prior to commencing work.

Work to be completed by April 15, 2016.

- 1. Operator shall set a CIBP at 10,665' (minimum of 50' above top most perforation) and place 250' Class H cement on top. Tag required.
- 2. Must conduct a casing integrity test before perforating and fracturing. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails.
- 3. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.
- 4. Surface disturbance beyond the originally approved pad must have prior approval.
- 5. Closed loop system required.
- 6. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
- 7. Operator to have H2S monitoring equipment on location.
- 8. A minimum of a **3000** (**3M**) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (3M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
- Subsequent sundry required detailing work done and completion report for the new formations. Operator to include well bore schematic of current well condition when work is complete.

10. See attached for general requirements.

TMAK 011516

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Permanent Abandonment of Production Zone Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within <u>ninety (90)</u> days from this approval.

If you are unable to plug back the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged back. Failure to do so will result in enforcement action.

- 2. <u>Notification</u>: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-393-3612
- 3. <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.
- 4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.
- 5. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either **Neat Class** "C", for up to 7,500 feet of depth or **Neat Class** "H", for deeper than 7,500 feet plugs.

6. <u>Subsequent Plug back Reporting:</u> Within 30 days after plug back work is completed, file one original and three copies of the Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. <u>Show date work was completed.</u>

