August 2007) DI B		OMB N	APPROVED D. 1004-0135 July <u>31, 2010</u>				
SUNDRY Do not use th abandoned we	NOTICES AND REPO is form for proposals to ii. Use form 3160-3 (AF	AGEMENT ORTS ON WELLS AT drill or to re-enter an PD) for such proposals.	sbad Fie	Lease Serial No. NMNM91078	r Tribe Name		
	PLICATE - Other instru	ctions on reverse side.	UCDAR	CA/Agre	ment, Name and/or No.		
1. Type of Well	· · · · · · · · · · · · · · · · · · ·			Well Name and No.			
2. Name of Operator		ASHLEE FECHINO	9.	LONGVIEW FED	ERAL 1-44		
RKI EXPLORATION & PROD	LLC E-Mail: ashlee.fed	chino@wpxenergy.com		30-015-38070			
3a. Address 3500 ONE WILLIAMS CENTI TULSA, OK 74172		3b. Phone No. (include area of Ph: 539-573-0212			WOLFCAMP GAS		
4. Location of Well <i>(Footage, Sec., 2)</i> Sec 1 T23S R28E 360FSL 33		n)	11	. County or Parish, EDDY COUNT	and State Y COUNTY, NM		
12. CHECK APP	ROPRIATE BOX(ES) T	O INDICATE NATURE	OF NOTICE, REPO	ORT, OR OTHE	R DATA		
TYPE OF SUBMISSION	YPE OF SUBMISSION TYPE OF ACTION						
Notice of Intent	<ul> <li>Acidize</li> <li>Alter Casing</li> </ul>	Deepen Fracture Treat	Production Reclamation	(Start/Resume) n	Water Shut-Off Well Integrity		
🔀 Subsequent Report	Casing Repair	New Construction	n 🗖 Recomplete	;	🛛 Other		
Final Abandonment Notice	Change Plans	Plug and Abando Plug Baak		•			
3. Describe Proposed or Completed Op If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involve testing has been completed Final A	ally or recomplete horizontally ork will be performed or provid d operations. If the operation r	ent details, including estimated s , give subsurface locations and r le the Bond No. on file with BLN esults in a multiple completion o	neasured and true vertic 1/BIA. Required subsec r recompletion in a new	sed work and appro al depths of all perti- uent reports shall b interval, a Form 31	nent markers and zones. e filed within 30 days 60-4 shall be filed once		
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\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

Prepared By: Jaime McAlpine, PE Email: jmcalpine@rkixp.com

# **RKI Exploration & Production, LLC** Longview #1-44

# **Recompletion Procedure**

Delaware sands East Herradura Bend Field

Section 1-T23S-R28E Eddy County, New Mexico

### API # 30-015-38070 Property No. 210730

<u>Spud Date:</u> 8/22/10 <u>Comp Date:</u> 3/16/11 Producing Formation: 1<sup>st</sup> Bone Spring 7,424'-7,452'

KB Elev: 3,059' GL Elev: 3,042'

5

TD: 7,737' PBTD: 7,691'

Marker Joint: DV Tool @ 4,968' per CBL

### **CASING SUMMARY:**

Safety Factor = 80% of new applied to burst, collapse and tension parameters in table.

Size	Depth (ft)	Weight (#/ft)	Grade psi	Connection Type	Capacity (bbls/ft)	ID (in)	Drift (in)	Burst (psi)	Collapse (psi)	Tension (lbs)
13 3/8"	299'	54.5	J-55	STC	0.1546	12.615	12.459	2,185	905	411,000
9 5/8"	2,715'	40	J-55	STC	0.0758	8.835	8.679	3,160	2,055	389,000
51/2"	7,737'	17	N-80	LTC	0.0233	4.892	4.767	6,190	5,025	278,400

 Surface:
 13 3/8" 54.5# J-55 STC: 0-299' - TOC @ surface

 Intermediate:
 9 5/8" 40# J-55 STC: 0' - 2,715'- TOC @ surface

 Production:
 5 1/2" 17# N-80 LTC: 0' - 7,737' - DV Tool @ 4,968'; TOC @ 125' per CBL

<u>COMPLETION HISTORY TO DATE:</u> 1st Bone Spring (7,424'-7,452') perforated and fracture stimulated 2/11. Well on rod pump production.

**<u>OBJECTIVE:</u>** Perforate, fracture stimulate and test the Avalon and Delaware sands

<u>NOTE:</u> Maximum allowable surface pressure for Delaware sand treatments down 5<sup>1</sup>/<sub>2</sub>" 17# N-80 is 6,150 psi. Test surface lines & frac pumps to 6,500 psi.

Make sure frac company installs a pressure transducer and a manual gauge on the annulus line so that the annulus pressure is monitored and recorded during the fracs.

### RKI REQUIRES THAT HARD HATS, STEEL TOE BOOTS, FIRE RETARDANT CLOTHING, AND SAFETY GLASSES BE WORN ON LOCATION

# HOLD SAFETY MEETING PRIOR TO COMMENCING PERFORATING, WIRE LINE AND PUMPING OPERATIONS

### NO IGNITION SOURCES WITHIN 100 FT OF THE WELLHEAD, FLOWBACK TANKS OR MANIFOLD.

### **PROCEDURE:**

- 1) Test safety anchors. SI flowline. Pressure test tubing to 400 psi using PU to pressure up tubing. Open flowline. Set clean frac tank and lay metal flowline.
- 2) MI RU Service Unit. Deliver 5 jts. new 2 7/8" 6.5# N-80 tubing. Deliver and set flowback frac tank. HU flowline. Set twenty four frac tanks and fill each with 480 BFW.
- 3) HO PU. Unseat pump. MI RU Hot oiler. Hot oil tubing with 40 BO. RD MO Hot Oiler.
- 4) ROH w/ pump. Load pump with diesel when get to surface.
- 5) ND WH and NU 5M# Hydraulic BOP.
- 6) Release TA. TIH w/ 5 its tubing and tag PBTD. LD 5 its. new tubing.
- 7) MI RU wireline and RU 5K# lubricator. Test lubricator 250 psi low and 4,000 psi high. RIH w/ JB/GR to 6,750'. RIH w/ wireline set 10K# Composite BP and set @ 6,665'.
- MI RU HP Pump Truck. Load casing with 2% KCL water and test casing & plug to 3,500 psi for 15 minutes. RD MO HP Pump Truck.
- MI RU Tuboscope. TOH and inspect tubing. RD MO Tuboscope. LD bad joints and replace w/ new 2 7/8" 6.5# N-80 tubing as required.
- 10) RIH with 3 1/8" HSC gun loaded with 22.7 gram Titan EXP 3323-301T charges, 0.40 EHD, 35.60" pen and 60° phasing and perforate Avalon sand as listed below. (NOTE: Perforations correlated to Halliburton DS Neutron/ Spectral Density dated 9/13/10) POOH, ensure all shots fired.

### Avalon sand (6,470'-6,482') Perforations

Set	Upper	Lower	<u>Feet</u>	<u>SPF</u>	<u>Shots</u>	Phasing
1	6,468'	6,482'	14	3	42	60°
TOTAL			14		42	60°

11) MI RU Frac company. Install 10K# WHIT. Pressure test lines/pumps to 6,500 psi. Fracture stimulate Avalon sand with 2,000 gals 15% NE FE acid + 60 ct. B.S. (1.3 SG) + 47,350 gals. 30# linear gel/x-link gel + 50,000# 16/30 Ottawa sand + 15,000# RC 16/30 Ottawa sand @ 45-55 BPM @ 2,800 psi (6,150 psi maximum STP) in the following stages:

### Avalon sand Fracture Treatment Schedule

Stage	Fluid Type	Stage' Vol (gal)	Cum Vol (gal)	Prop. Conc. (ppg)	Proppant/Fluid Type	Stage (lbs)	Cum Prop. _(lbs)	Rate (BPM)
1	Linear (30#)	2,772	2,772		Load/Bkdn Well			5
2	Acid	1,512	4,284		15% HCL Acid/60 BS			15.1
3*	Linear (30#)	9,618	13,902		Acid Flush			15.5
4	X-Link (30#)	4,998	18,900		Pad			54.5
5	X-Link (30#)	5,208	24,108	1.0	16/30	5,000	5,000	55.3
6	X-Link (30#)	5,460	29,568	2.0	16/30	10,000	15,000	53.8
7	X-Link (30#)	5,418	34,986	3.0	16/30	15,000	30,000	55.3
8	X-Link (30#)	5,796	40,782	4.0	16/30	20,000	50,000	54.9
9	X-Link (30#)	3,696	44,478	5.0	16/30 RC	15,000	65,000	54.4
10	Acid	504	44,982		Spot Acid			45
11	Linear (30#)	5,502	50,484		Flush			53.6

# \*(NOTE: SD, Surge (5 seconds) ball sealers after pump Stage 3, Wait 15 minutes, start Stage 4. If necessary RIH w/ JB/GR and knock balls off perforations)

SD, Record ISIP, 5 min SIP, 10 SIP, 15 min SIP.

TOTAL

- 12) RU 5K# lubricator. Test lubricator 250 psi low and 4,000 psi high. RIH w/ JB/GR to 6,425'. RIH w/ wireline set 10K# Composite frac plug w/ built in ball and set @ 6,425'.
- 13) Load casing with 2% KCL water and test casing & plug to 3,500 psi for 10 minutes.
- 14) RIH with 3 1/8" HSC gun loaded with 22.7 gram Titan EXP 3323-301T charges, 0.40 EHD, 35.60" pen and 60° phasing and perforate Pinnacle A1 (Lentini) sand as listed below. (NOTE: Perforations correlated to Halliburton DS Neutron/ Spectral Density dated 9/13/10). POOH, ensure all shots fired.

ts Pha	Shots	SPF	Feet	Lower	Upper	Set					
61	7	1	7	6,320'	6,313'	1					
	26	2	13	6,310'	6,297'	2					
60	25	1	25	6,291'	6,266'	3					

# Pinnacle A1 (Lentini) sand (6,266'-6,320' OA) Perforations

15) Pressure test lines/pumps to 6,500 psi. Fracture stimulate Pinnacle A1 (Lentini) sand with 4,000 gals 15% NE FE acid + 85 ct. B.S. (1.3 SG) + 112,150 gals. 30# linear gel/x-link gel + 160,000# 16/30 Ottawa sand + 20,000# RC 16/30 Ottawa sand @ 70-80 BPM @ 3,200 psi (6,150 psi maximum STP) in the following stages:

45

58

60°

Stage	Fluid Type	Stage Vol (gal)	Cum Vol (gal)	Prop. Conc. (ppg)	Proppant/Fluid Type	Stage (lbs)	Cum Prop. (lbs)	Rate (BPM)
1	Linear (30#)	2,520	2,520		Load/Bkdn Well			15
2	Acid	3,486	6,006		15% HCL Acid/85 BS			15.1
3*	Linear (30#)	6,510	12,516		Acid Flush			15.4
4	Linear (30#)	6,510	19,026		Pad		_	78.8
5	X-Link (30#)	22,008	41,034		Pad			76.2
6	X-Link (30#)	16,716	57,750	1.0	16/30	16,000	16,000	75.5
7	X-Link (30#)	17,430	75,180	2.0	16/30	32,000	48,000	75.3
8	X-Link (30#)	18,186	93,366	3.0	16/30	48,000	96,000	76.4
9	X-Link (30#)	27,888	121,254	4.0	16/30	64,000	160,000	76.6
10	Linear (30#)	9,114	130,368		Flush			62
		i –						

# Pinnacle A1 (Lentini) sand Fracture Treatment Schedule

# \*(NOTE: SD, Surge (5 seconds) ball sealers after pump Stage 3, Wait 15 minutes, start Stage 4. If necessary RIH w/ JB/GR and knock balls off perforations)

SD, Record ISIP, 5 min SIP, 10 SIP, 15 min SIP.

- 16) RU 5K# lubricator. Test lubricator 250 psi low and 4,000 psi high. RIH w/ JB/GR to 6,240'. RIH w/ wireline set 10K# Composite frac plug w/ built in ball and set @ 6,225'.
- 17) Load casing with 2% KCL water and test casing & plug to 3,500 psi for 10 minutes.
- 18) RIH with 3 1/8" HSC gun loaded with 22.7 gram Titan EXP 3323-301T charges, 0.40 EHD, 35.60" pen and 60° phasing and perforate Pinnacle A2 and B sands as listed below. (NOTE: Perforations correlated to Halliburton DS Neutron/ Spectral Density dated 9/13/10). POOH, ensure all shots fired.

Set	Upper	Lower	<u>Feet</u>	<u>SPF</u>	Shots	Phasing
1	6,187'	6,190'	3	2 .	6	60°
2	6,172'	6,180'	8	1	8	60°
3	6,147'	6,158'	11	2	22	60°
4	6,109'	6,129'	20	1	20	60°
5	6,092'	6,102'	10	2	20	60°
TOTAL			52		76	60°

# Pinnacle A2 and B sands (6,092'-6,190' OA) Perforations

19) Pressure test lines/pumps to 6,500 psi. Fracture stimulate Pinnacle A2 and B sands with 5,000 gals 15% NE FE acid + 115 ct. B.S. (1.3 SG) ÷ 137,000 gals. 30# linear gel/x-link gel + 200,000# 16/30 Ottawa sand + 25,000# RC 16/30 Ottawa sand @ 75-80 BPM @ 3,200 psi (6,150 psi maximum STP) in the following stages:

Stage	Fluid Type	Stage Vol (gal)	Cum Vol (gal)	Prop. Conc. (ppg)	Proppant/Fluid Type	Stage (lbs)	Cum Prop. (lbs)	Rate (BPM)
1	Linear (30#)	1,638	1,638		Load/Bkdn Well		_	14.4
2	Acid	5,376	7,014		15% HCL Acid/115 BS			15.1
3*	Linear (30#)	6,510	13,524		Acid Flush			15.5
4	Linear (30#)	6,510	20,034		Pad			79.2
5	X-Link (30#)	29,988	50,022		Pad			79
6	X-Link (30#)	28,224	78,246	1.0	16/30	20,000	20,000	79.2
7	X-Link (30#)	21,798	100,044	2.0	16/30	40,000	60,000	78.8
8	X-Link (30#)	22,722	122,766	3.0	16/30	60,000	120,000	79
9	X-Link (30#)	19,950	142,716	4.0	16/30	80,000	200,000	79
10	X-Link (30#)	11,340	154,056	5.0	16/30 RC	25,000	225,000	79.3
11	Linear (30#)	5,880	159,936		Flush			79.2

Pinnacle A2 B sands Fracture Treatment Schedule

# \*(NOTE: SD, Surge (5 seconds) ball sealers after pump Stage 3, Wait 15 minutes, start Stage 4. If necessary, RIH w/ JB/GR and knock balls off perforations.)

- 20) SD, Record ISIP, 5 min SIP, 10 SIP, 15 min SIP.
- 21) RU 5K# lubricator. Test lubricator 250 psi low and 4,000 psi high. RIH w/ JB/GR to 6,075'. RIH w/ wireline set 10K# Composite frac plug w/ built in ball and set @ 6,075'.
- 22) Load casing with 2% KCL water and test casing & plug to 3,500 psi for 10 minutes.
- 23) RIH with 3 1/8" HSC gun loaded with 22.7 gram Titan EXP 3323-301T charges, 0.40 EHD, 35.60" pen and 60° phasing and perforate Pinnacle C sand as listed below. (NOTE: Perforations correlated to Halliburton DS Neutron/ Spectral Density dated 9/13/10). POOH, ensure all shots fired. RD MO wireline.

Set	Upper	Lower	Feet	<u>SPF</u>	Shots	Phasing
1	6,042'	6,052'	10	1	10	60°
2	6,024'	6,038'	14	1	14	60°
3	6,012'	6,017'	5	1	5	60°
4	5,994'	6,008'	14	2	28	60°
5	5,984'	5,991'	7	1	7	60°
6	5.972'	5.981'	9	1	9	60°

### Pinnacle C sand (5,972'-6,052' OA) Perforations

TOTAL		59	73	60°

24) Pressure test lines/pumps to 6,500 psi. Fracture stimulate Pinnacle C sand with 3,000 gals 15% NE FE acid + 110 ct. B.S. (1.3 SG) + 134,850 gals. 30# linear gel/x-link gel + 200,000# 16/30 Ottawa sand + 20,000# RC 16/30 Ottawa sand @ 75-80 BPM @ 3,200 psi (6,150 psi maximum STP) in the following stages:

Stage	Fluid Type	Stage Vol (gal)	Cum Vol (gal)	Prop. Conc. (ppg)	Proppant/Fluid Type	Stage (lbs)	Cum Prop. (lbs)	Rate (BPM)
1	Linear (30#)	2,562	2,562		Load/Bkdn Well			3
2	Acid	5,376	7,938		15% HCL Acid/110 BS			15
3*	Linear (30#)	6,006	13,944		Acid Flush			15.5
4	Linear (30#)	6,006	19,950		Pad			79.2
5	X-Link (30#)	35,994	55,944		Pad			81.1
6	X-Link (30#)	25,074	81,018	1.0	16/30	24,000	24,000	79.7
7	X-Link (30#)	26,166	107,184	2.0	16/30	48,000	72,000	78.6
8	X-Link (30#)	27,258	134,442	3.0	16/30	72,000	144,000	79.5
9	X-Link (30#)	20,958	155,400	4.0	16/30	96,000	240,000	80
10	X-Link (30#)	12,978	168,378	5.0	16/30 RC	20,000	260,000	79.2
11	Linear (30#)	6,006	174,384		Flush			80

# Pinnacle C sand Fracture Treatment Schedule

### \*(<u>NOTE: SD, Surge (5 seconds) ball sealers after pump Stage 3, Wait 15 minutes, start Stage 4. If necessary, RIH</u> w/JB/GR and knock balls off perforations.)

- 25) SD, Record ISIP, 5 min SIP, 10 SIP, 15 min SIP. RD MO wireline unit. RD WHIT. RD MO frac company. SI well overnight.
- 26) Install flow valve/choke w/ carbide seat/stem. Open well, flow back and test.
- 27) IF NECESSARY, MI RU pump truck. Pump 120 bbls. 10.2 ppg brine water down caing to kill well. Feed in brine water as necessary to keep well dead.
- 28) MI RU pump, tank, and swivel.
- 29) TIH w/ 4¾" bit, 4 DC, XO, tubing. Clean out sand and DO Comp frac plugs and push to CP. Circulate hole clean.
- 30) TOH, LD BHA. RD MO pump, tank, swivel.
- 31) Feed in brine water as necessary to keep well dead. TIH w/ purge valve, 2 jts tubing, D-2705-G Cavins combination GA/desander, SSN, 16 jts tubing, TAC, 175 jts. 2 7/8" 6.5# L-80 EUE. EOMA @ 5,983'+/-, SN @ 5,921'+/-, TAC @ 5,425'+/-.
- 32) ND BOP. Set TAC w/ 10K# tension @ 5,425'. NU B-1 flange. RD MO pump truck. Install pumping tee.
- 33) Load downhole pump with diesel. RIH w/ 2<sup>1</sup>/<sub>2</sub>" x 1<sup>1</sup>/<sub>2</sub>" x 20' RHBC pump, on/off tool, 1' 7/8" lift sub, 160 ct. <sup>3</sup>/<sub>4</sub>" Norris 97 rods, 80 ct. 7/8" Norris 97 rods, 26' x 16' polished rod/liner. Space and seat pump. Load tubing and pressure pump to 400 psi. HO PU set @ 168" stroke @ 6.2 spm.
- 34) RD MO Service Unit. Start PU.
- 35) Produce well for a while
- 36) MIRU pulling unit and drill out CP at 6,665' and cleanout well to PBTD
- 37) TOOH laying down tubing

38) RIH with wireline and set CP at 6,393' (in between Avalon and Pinnacle AT perfs)

39) RIH with tubing and set TAC - 5,740', SN - 6,290', and EOT - 6,359'

40) RIH with rods and pump

41) RDMO

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# **Emergency Contacts - New Mexico:**

Hospital:	Carlsbad Medical Center 2430 W. Pierce St., Carlsbad, NM 88220	(575) 887-4100
Sheriff's Office:	Lea County Sheriff Dept Eddy County Sheriff Dept	(575) 396-3611 (575) 887-7551
Emergency Contacts – Texas:		
Hospital:	Reeves County Hospital 2323 Texas St, Pecos TX 79772	(432) 447-3551
Sheriff's Office:	Reeves County Sheriff Dept Loving County Sheriff Dept	(432) 445-4901 (432) 377-2411

