

**Well Info:**

Lion Government 33-36

API #: 05-081-07264

Moffatt County, CO

NESE 36 12N 101W

CO MAN:

Engineer: Adam Johnson

Well Status: PR / plunger lift

TVD: 5,107'

**Directions:**

40.95558, -108.69523

From Rock Springs:

Head South on 430

Continue onto gravel road as you enter Colo

Go another 3.8 miles

Turn left onto CR 63 and go 3.5 miles

Turn right and the well is the third location back

**Emergency Services:**

Rock Springs sheriff: 307-922-5300

Rock Springs fire: 307-352-1475

Hospital:

Memorial Hospital of Sweetwater County – 307-362-3711

1200 College Drive

Rock Springs, WY 82901

**Casing & Tubing Info:**

Surface casing: 8-5/8" / 24# / J-55 / 514' / TOC @ surface

Production casing: 4-1/2" / 11.6# / N-80 / 5,107' / TOC @ 2,570'

Tubing: 2-3/8" / 4.7# / J-55 / 4,936'

**Current Reservoir Parameters:**

Reservoir Pressure – ~1,500 psi

BHT – 130F

**Vendors**

WO Rig – Integrated

Wireline – Summit

Frac – Halliburton – Alex - 970-261-7593

BOP – KLX - (307) 382-4168

Frac Valve – KLX - (307) 382-4168

### Pre-Job

1. Blow well down 2 days before WO rig on location through sales meter
2. Make sure separator is in working order
3. Install tank heater on oil tank
4. Make note of source of all fresh water delivered to location for frac to submit to BLM
5. Submit form 42 – 48 hrs notice of frac to COGCC
6. Haul 3 frac tanks and fill with 1,500 bbl of fresh water treated with Biocide at 2 gal per 100 bbl
7. Bring pipe racks to lay tubing down on location out of way

### Job

1. MIRU WO rig, pump, and tank
2. ND WH. NU frac valve below the BOP.
3. POOH w/ tubing
  - a. 8' sub jt
  - b. 153 jts – 2-3/8" tubing
  - c. R Nipple
  - d. 8' sub jt
  - e. Notched collar
4. RIH with casing scraper down to 4,950'
5. POOH w/ tbg and casing scraper
6. RIH w/ CIBP on tubing
7. Set CIBP @ 4,846' (collars @ 4,820' & 4,863')(KB = 13')
8. Dump bail with tbg 2 sks cement on top of CIBP
9. POOH w/ tubing laying down in singles on pipe racks out of way
10. Load hole with produced water treated with Biocide and 2% KCl with rig pump
11. MIRU hot oiler, hook up high pressure hose directly to wellhead
12. Pressure up backside to 3,500 psi - hold for 5 min
13. Rig up e-line with high pressure lubricator
14. Make dummy run with following BHA on e-line
  - a. 3-1/8" gauge ring
  - b. 3-1/8" CCL
15. Make sure tubing is full to shoot perfs in neutral
  - a.  $.433 * 4,600 = 1984$  psi
  - b. Expected reservoir pressure = 1992 psi
16. RIH w/ 3-1/8" casing gun and CCL and gamma
17. RIH down to 3,872' and correlate depth to short casing jt from 3,872' – 3,894'
18. Perf from 4,630' – 46'
19. POOH w/ casing gun and ensure all shots have fired
  - a. Monitor surface pressure during shot
  - b. 22.7-gram charge
  - c. .40" hole size
  - d. 40" penetration
  - e. 6 spf

20. MDRO e-line
21. ND BOP.
22. MDRO WO Rig.
23. MIRU frac crew
24. Frac well with following schedule:

Stage	HCL % / Prop Mesh	Fluid Type	Clean Fluid [gal]	Water Rate [bpm]	CUM Water [gal]	Time [min]	Prop Conc [ppg]	Prop Volume [lbs]
ACID	15	15% HCl acid	500	10	500	1.2		
PAD		15# crosslinked gel	13,608	30	14,108	10.8		
SAND	20/40	15# crosslinked gel	10,802	30	24,910	8.6	2.5	27006
SAND	20/40	15# crosslinked gel	11,537	30	36,447	9.2	3.5	40378
SAND	20/40	15# crosslinked gel	8,705	30	45,152	6.9	4.5	39172
SAND	20/40	15# crosslinked gel	4,300	30	49,452	3.4	5.5	23650
SAND	20/40	15# crosslinked gel	1,300	30	50,752	1.0	6	7800
FLUSH		slick water	3500	30	54,252	2.8		

54,252

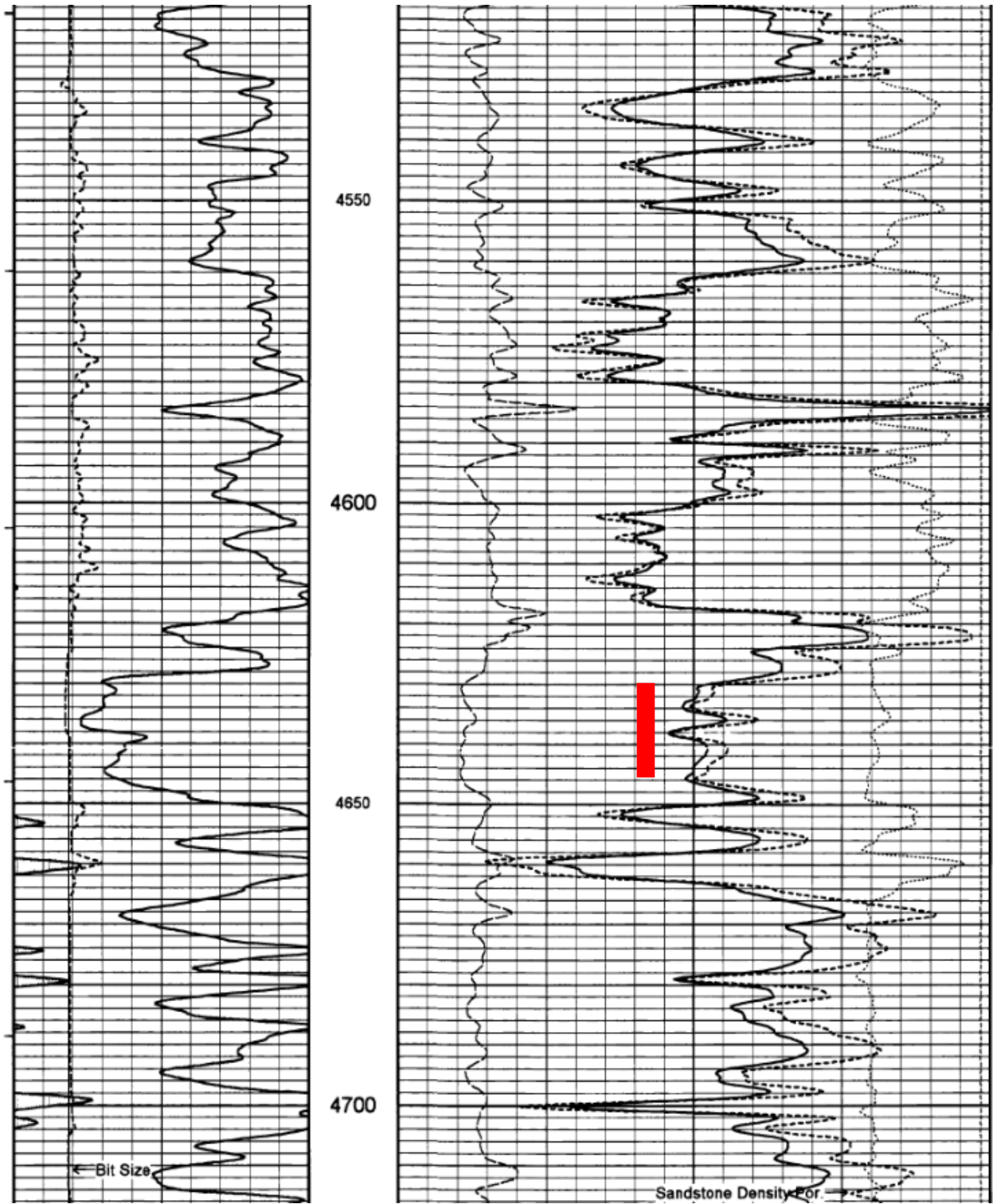
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\* flush is 115% casing volume

\* pad is 25% of total job volume

25. RDMO frac crew
26. MIRU WO Rig
27. RIH with rods and tubing based on proposed WBD
28. Turn well to production

POROSITY LOG



# INDUCTION LOG

