

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ HOT ☐ Other _____				5. LEASE DESIGNATION AND SERIAL NO. NM-18463	
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. REPAIR ☐ Other _____				6. IF INDIAN, ALLOTTEE OR TRIBE NAME None	
2. NAME OF OPERATOR Kenai Oil and Gas Inc.				7. UNIT ACCESSION NAME None	
3. ADDRESS OF OPERATOR 717 17th St., Ste. 2000, Denver, CO 80202-1375				8. FARM OR LEASE NAME Federal - 15	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface: 900' FNL - 900' FEL At top prod. interval reported below At total depth				9. WELL NO. #41	
14. PERMIT NO. _____ DATE ISSUED 11/25/80				12. COUNTY OR PARISH San Juan	
				13. STATE New Mexico	
15. DATE SPUNDED 4/16/81	16. DATE T.D. REACHED 4/27/81	17. DATE COMPL. (Ready to prod.) 6/12/81	18. ELEVATIONS (DF, RNB, RT, GR, ETC.) 6878' GL; 6891' KB ₂		19. ELEV. CASINGHEAD ---
20. TOTAL DEPTH, MD & TVD 5550' KB	21. PLUG BACK T.D. MD & TVD 5515' KB	22. IS MULTIPLE COMPL. HOW MANY? None	23. INTERVALS DRILLED BY →	24. PRODUCE TOOLS Yes	CABLE TOOLS No
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* Lower Gallup: 5332-5393' Upper Gallup: 5285-5178'					25. WAS DIRECTIONAL SURVEY MADE No
26. TYPE ELECTRIC AND OTHER LOGS RUN CDNL; DINL; JBL/GR					27. WAS WELL CORED No
28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	
8-5/8"	24#	537.75'	12-1/4"	320 SXS.	
5-1/2"	14#	5557.76'	7-7/8"	1st stage: 390 SXS 2nd stage: 536 SXS	
29. LINER RECORD					
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	
	NONE				
30. TUBING RECORD					
SIZE	DEPTH SET (MD)	PACKER SET (MD)			
2-3/8"	5400'	----			
31. PERFORATION RECORD (Interval, size and number) SEE ATTACHED COMPLETION HISTORY					
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED SEE ATTACHED COMPLETION HISTORY					
33.* PRODUCTION					
DATE FIRST PRODUCTION 6/2/81		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing and swabbing.			WELL STATUS (Producing or shut-in) Shut in
DATE OF TEST 6/11/81	HOURS TESTED 12	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL. 70	GAS—MCF. 500
FLOW. TUBING PRESS.	CASING PRESSURE 700 psi.	CALCULATED 24-HOUR RATE →	OIL—BBL. 140	GAS—MCF. 1,000	WATER—BBL. 360
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Will be sold when connected to gas pipeline.					TEST WITNESSED BY Dave Howell
35. LIST OF ATTACHMENTS Completion history; wellsite geologic report.					
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records					
SIGNED D. H. [Signature]		TITLE Manager of Operations		DATE 10/30/81 6 1981	

*(See Instructions and Spaces for Additional Data on Reverse Side)

FARMINGTON DISTRICT

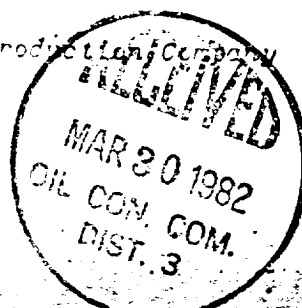
BY [Signature]

NM000

FORMATION TOPS (From "E" Logs)
 Elevations: 4378 DGL, 4891 KB

FORMATION	DEPTH	ELEVATION
Point Lookout	1548	45342
Cliff House	2997	42893
Point Lookout	3925	42965
Hance	4118	42772
Gallup	4954	41036
Total Depth (Drilled)	5550	4040
Total Depth (Logged)	5552	41038





COMPLETION HISTORY

- 5-14-81 Rig up Action Well Service Rig #6.
- 5-15-81 Weld on 5 1/2" bell nipple and nipple and nipple up Larkin 5 1/2" X 2 3/8" screwed wellhead. Received 172 jts 2 3/8" tubing from Action Well Service yard measuring 5693.92' threads off. Received circulating equipment and rigged up. RIH with 4 3/4" bit, bit sub, and 117 jts tubing and SD for night. Left bit 5 jts above DV tool.
- 5-16-81 RIH 5 jts and tag DV tool at 4050' KB with total of 167 jts. Action's pump would not start. With Western, drill DV tool in 3/4 hr. RIH to 5515' KB with 223 jts and circulate hole 1 hr. Pressure test casing to 3500 psi-5 min-OK. Roll hole to 2 1/2" KCL water with 130 bbls. POOH with bit. Pig up Dresser Atlas to run GBL-VDL log and 2 tools failed. SI for night.
- 5-17-81 Sunday-Crew off
- 5-18-81 Rig up Dresser Atlas and run GBL-VDL log 5515' to 4700'. No cement across proposed perfor. RIH and shot 4 holes at 5510' KB. RIH Baker retrievable packer and 104 tubing and set packer at 5350' KB. SI for night.
- 5-19-81 Pig up Western and pump 250 gal HCL at 1.2 bpm at 2800 psi. Flushed with 34 bbls 2 1/2" KCL water at 3.7 bpm at 2800 psi. ISIP 1450 psi. With Dowell, pressure casing to 1000 psi. Squeeze with 125 sz Class "B", .06% Flac. Staged cement for 2 hrs. Left 2000 psi on tubing and 1000 psi on casing.
- 5-20-81 No pressure on tubing. Ried casing pressure. POOH with packer. RIH 4 3/4" bit, bit sub (3.20') and 175 jts tubing and tag cement at 5454' KB. Drilled cement to 5515'. Rig up Western and pressure test to 3500 psi and would bleed right off. Pressure to 3500 and bled to 2200 psi in 3 min. POOH. SI for night.
- 5-21-81 RIH with Baker Fullbore packer to 5510' KB, and spotted 150 gallons 15% HCL. POOH 198' and set fullbore at 5334' KB. Pressured casing to 1000 psi. With Western, put acid away at 1.8 bpm at 2800 psi displacing with 2 1/2" KCL water. Pig up Dowell and squeeze with 125 sz Class "B" neat. Closed packer at 1 1/2 bpm at 2800 psi. Shut down 15 min and pressured to 3500 psi. Bled off 200 psi in 35 min. Pressured to 3500 psi-no bleed off. Released packer and POOH.
- 5-22-81 RIH with 4 3/4" bit and bit sub (3.20') and 167 jts 2 3/8" tubing (5392.68') and tag cement at 5334' KB. Drill good hard cement to 5515' KB with 167 jts tubing measuring 5528.34' threads off. Circulate hole clean. Roll hole to 2 1/2" KCL water. Pull 1 jt casing pressure test squeeze to 1050 psi, 10 min, no bleed off. POOH. Pig up 30 Wireline and run GBL-VDL log from 5515' to 2000' KB. Logged with 200 psi on casing. Gamma ray tool quit at 2000'. Will log 2000' to surface or next bond log. Acceptable bond from 5150' KB to TD. SI for night.
- 5-23-81 Rig up Dresser Atlas to run Spectra-log. Panel in truck malfunctioned after logging 50'. Pig down end of truck to rig.
- 5-24-81 Sunday-Crew off

COMPLETION HISTORY CONTINUED

5-26-81

Holiday

5-26-81

SICP 1000 psi. Bled off immediately. Rig up 60 Wireline and set HALCO Speedy line drillable BP at 5180' KB. Test BP 3000. Perforate 4 squeeze holes 5144-45' KB. RIH with Baker Model "K" cement retainer (2.25'), receptacle (2.58') and 150 jts tubing (4962.67'), for total of 4967.50' and set bottom of retainer at 4970' KB. Rig up National Cementers and pressure casing to 1000 psi and test tubing to 3500 psi, OK. Establish rate of 2 1/2 bpm at 2000 psi down tubing. Using City water mix 75' ex Class "B" neat at 3 bpm at 2200 psi. Wash up lines and displace at 2 1/2 bpm at 1400 psi. Cleaned retainer by 1 bbl and SD for 20 min. Pumped in 1 bbl to 500 psi. SD 1 hr, pumped in 1 bbl to 1400 psi and broke back to 600. Held 600 psi. Left 1 bbl in casing. String out of retainer and reversed out no cement. Pull 30 stds tubing and SD for night.

5-27-81

Finish POOH. RIH with HOKCO super mill and bit sub (2.12') and 150 jts tubing (4962.67'), and tag retainer at 4970' KB. Drig retainer in 3 1/4 hrs and tag cement at 5074' KB. Mill on retainer junk at 5074' KB for 4 hrs. Circulate hole clean and pump 2 stds and SI for night.

5-28-81

RIH and with 150 jts tubing in (5100.22') with BHA, drig on retainer junk 5074' to 5150' KB. Circulated hole clean. Pressured casing to 1000 psi and bled to 600 psi in 5 minutes. Drilled out to BP at 5180' KB. POOH. Rig up Dresser Atlas and ran CBL-VDL Log 5180' to 4000' and 2000' to surface with 800 psi on casing. Have satisfactory bond up to 4850' KB. SI for night.

5-29-81

RIH with 4 3/4" bit and bit sub (4.00') and 157 jts tubing (5194.02') and tag BP at 5180' KB. Drig out in 3 hrs. RIH with 167 jts tubing (5525.14') and circulate hole clean at 5515' KB. POOH. Rig up Dresser Atlas and ran Spectra Log to 3000'. SI for night.

5-30-81

Rig up Dresser Atlas and perforate Lower Gallup 2 JSPF 5332-34, 35-37, 47-49, 52-54, 75-77, 97-99, 5442-45, 53-55, 63-65, 83-84, and 92-93, total of 42 holes. All new Spectra Log depths. RIH with Baker Retr Evamatic Packer & SN (6.75'), and 158 jts tubing (5200.25') and set packer at 5367' KB. Rig up NOWSCO and acidize with 2000 gal 15% HCL, NE agent, and clay sealizer and 60 balls. With 11 BA in, nearly balled off at 3500 psi, broke back to 2800 at 2 bpm. With 2 2/3 acid in, packer failed at 1 bpm at 3500 psi. Good ball action but no ball off. ISIP 700 psi. Total LW 75 bbls. Lower packer then perfs and reset at 5367' KB. Rig up to sub. IFL at 500'. Made 6 runs and recovered 20 BLW in 1 1/2 hr. FFL 5100'. SI for weekend.

5-31-81

Sunday-Crew off

6-1-81

SITP 25 psi. Ran sub IFL 1400'. Made 4 runs and recovered 12 BLW and swabbed dry. Wait 1 hr, made run and recovered 7 BLW. FFL 5100'. POOH. Rig up NOWSCO and track with 72450 gal one Newfrac II LB-30 fluid with 67000 20/40 sand and 12000 10/20 sand and 400 SCF B nitrogen and flushed with 60 hole volume of 2% KCL water. Max tri pressure 2100 psi, max ann pressure 200 psi. Ann pressure 0 psi. AIR 41 bpm. ISIP 1400 psi. 25 min at 1300 psi. Ann pressure 0 psi for gel to break. Total LW to be recovered 500 bbls. Open well on 1/4" choke at 2:30 p.m.

Federal 15 #42

WENH Section 15, T23N, R9W
San Juan County, New MexicoCOMPLETION HISTORY CONTINUED

Unloading good. Left open overnight. At 4:00 p.m. FCP 400 psi.

6-2-81

Well dead on arrival. RIH with notch collar and 166 jts tubing all measuring 5492.50' and tag at 5482' KB. Pulled up and was stuck in sand. Work pipe to 65000 lbs and pulled free. Landed 162 jts tubing at 5362' KB. Rig up to swab. IPL 700'. Slight show of oil on initial run. Made 35 runs and recovered 130 BLW in 6 hrs. Well kicked off flowing at 2 p.m. FFL 1800'. CR 450 at 2 p.m. Flowed at 7% oil cut for 1 hr. Installed 3/4" choke for 1 hr, FCP 350 psi, FTP 30 psi, 20% oil cut at 4 p.m. SI for night.

6-3-81

SICP 450 psi, TP 420'. Pumped in 20 bbls 2% KCL water and killed tubing. Eled casing shortly and POOH. Rig up 60 Wireline and set Baker wireline set, tubing retrievable BP at 5320' KB. Perforate upper casing one shot at 5285, 84, 83, 82, 78, 77, 67, 66, 61, 59, 49, 48, 39, 38, 18, 17, 16, 15, 14, 13, 12, 09, 08, 5192, 197, 5196, 29, 28, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, total of 41 holes. No reaction after perforating. SI for night.

6-4-81

SICP 50 psi. RIH with Baker retrievable packer (6.20'), and SN (.75') and 100 jts tubing (5293.87') and set packer at 5305' KB. Pressure tested BP to 3000 psi, 10 min, OK. Release packer and spotted 5 gal sn on BP. Pulled 7 jts and set packer at 5074' KB. Rig up NOWSCO and acidize with 2000 gal 15% HCL with clay stabilizer, NE agent and CO balls. Slight ball action. AIR 5 bpm at 1800 psi. ISIP 350 psi. 5 min SIP 250 psi. Open to pit and flowed back 15 BLW and died. Released packer and lowered same through perfs and reset at 5074' KB. Ran swab. IPL 700'. Swabbed 40 BLW and well kicked off flowing at 5 th 10% oil cut for 3/4 hr and died. Made 3 runs and well kicked off flowing at 30% oil cut. Est. 75 BLW recovered for day and good show of oil. SI for night.

6-5-81

SITP 500 psi. Pumped 20 bbls 2% KCL water down tubing. Release packer and lower through perforations. POOH. Rig up NOWSCO and frack with 72450 gallons Newfrack II LR-20 with 400 SCFPE nitrogen, 67000# 20/40 sand, 52000# 10/20 sand. AIR 26 bpm at 1600 psi. ISIP 1400. 15 min SIP 1400. Left SI 1 hr. Total LW to be recovered 1775 bbls. Open through 3/4" choke and left with night watchman. After 1 hr. FCP 600 psi.

6-6-81

Well died at 4 a.m. RIH with sawtooth collar and SN 1 jt up and tagged sand fill at 5250' KB. Place EOT at 5127' and ran swab. IPL 1000'. Made 2 runs and well kicked off flowing at 25 bp hr, 15 to 25% oil cut. FCP 60 psi, FTP 20 psi. Flowed 100 BLW and 15 BO in 4 hrs. SI for weekend.

6-7-81

Sunday-Crew off

6-8-81

SITP 600 psi, SICP 400 psi. Open through 3/4" choke for 1 hr and flowed 20 PO and 20 BLW at FTP 175 psi, FCP 250 psi. SI and pumped 20 bbls 2% KCL water down tubing. POOH with tubing and notched collar. RIH with Baker hydrostatic bailer and retrieving head and tag at 5450' KB. CO to BP at 5320' KB and landed onto BP. POOH. RIH with notched collar and bailer and tag at 5400' KB. CO to 5500 and bailer quit. Seemed

COMPLETION HISTORY CONTINUED

like sand was sticking tubing or coming in on top of tubing. POOH.
RIH with notched collar and hydrostatic bailer and left EOT at 5100'
for night.

6-9-81

SICP 150 psi. Bled off in 5 min. RIH to 5425' and tagged up. Could
get through but would drag 20-25000 lbs over to get back up through
5425'. POOH. No sand in bailer. RIH with bailer and tagged at 5460'
and worked to PPTD of 5515' KP. Still drag past 5425' KB. No sand
recovered. Ran final production tubing as follows:

1	ft	2 3/8" tubing open ended	33.25'
		Std seating nipple	.80'
162	fts	2 3/8" tubing	5259.43'
163	fts		5293.48'

landed below KP 46.52'
tubing landed at 5400.00' KB

Nipple down BOP and installed master valve. Ran swab 7 runs and re-
covered 40 BLW in fracture tank---5 to 10% oil and well kicked off flowing
10% oil. Died after 1 hr. SI for night.

6-10-81

SICP 400, TP zero. IFL 1500'. Made 21 runs in 8 hrs and recovered
130 BLW and 30 EO. Oil cut started at 5% and increased throughout day
to 25%. All fluid gas cut. Final FL 2500'. Final CP 780 psi.
SI for night.

6-11-81

SICP 950 psi, SITP 175 psi. Bled tubing, no fluid to surface. Ran
swab, IFL 1700'. Made 7 runs and well kicked off flowing at 40 BP hr,
82% oil 1st hr, 45% oil 2nd hr, and died in 2 hrs. Gas 500 MCFPD.
Made 2 runs, kicked off for 1/2 hr and died. Made 2 runs and kicked off
flowing 30 bp/hr at 25% oil. CP 700 psi. Final grind out 40% oil,
gas 500 MCFPD. Total for day 120 BLW and 70 EO. SI for night.

6-12-81

SICP 1000 psi, SITP 250 psi. Bled tubing--no fluid to surface. Ran
swab. IFL 1800'. Made 4 runs and well kicked off flowing for 1/2 hr.
For day made 10 runs and swabbed and flowed 55 EO and 55 PLW. Oil cut
varied from 40% to 60% and averaged 55%. Final CP 600 psi. Longest
time was 2 1/2 hrs. SI for night. Gas good all day.

6-13-81

SICP 850 psi, SITP 200 psi. Bled tubing, ran swab, IFL 2300'. Well
kicked off flowing for 1 hr at 50% oil cut. Made 1 run per hr for
8 hrs and recovered 48 EO and 32 BLW. Final CP 600, FFL 2700'. Well
flows gas continuously at approximately 500 MCFPD, but quits lifting
fluid. Plan to rig down Monday. SI for weekend. Final O% cut 70%.