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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Revised 1-1-65

5a. Indicate Type of Lease
State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.
L-2986

1a. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

DRY ☐

OTHER ☐

b. TYPE OF COMPLETION

NEW WELL ☒

WORK OVER ☐

DEEPEN ☐

PLUG BACK ☐

DIFF. RESVR. ☐

OTHER ☐

2. Name of Operator

Kenai Oil and Gas Inc.

3. Address of Operator

717 17th Street, Ste. 2000, Denver, CO 80202

4. Location of Well

UNIT LETTER 0 LOCATED 790 FEET FROM THE South 1750 FEET FROM

East

LINE OF SEC. 32

TWP. 24N

RGE. 8W

15. Date Spudded

5/16/79

16. Date F.O.D. Reached

10/7/79

17. Date Compl. (Ready to Prod.)

11/9/79

18. Formations (DF, RKB, RT, GR, etc.)

7007' GR 7019' KB

19. Elev. Casinghead

7008'

20. Total Depth

6521' KB

21. Plug Back T.D.

5428' KB

22. If Multiple, Indicate

Not multiple

23. Intervals Cased By

All

Rotary Tools

None

24. Producing Interval(s), of this completion - Top, Bottom, Name

Upper and Lower Gallup 5264 - 5383'

25. Was Directional Survey Made

No

26. Type Electric and Other Logs run

DI Guard Log, CBL, LNCD, FF-MSG

27. Was Well Cased

Yes

28.

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	295' KB	12-1/4"	275 sxs. reg. Class "G"	None
4-1/2"	11.6 & 10.5#	6520' KB	7-7/8"	700 sxs. 50/50 Pozmix	None

29.

LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
NONE				

TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-3/8"	5392.20' KB	Drillable BP @ 5428'

31. Perforation Record (Interval, size and number)

Lower Gallup 5375-83' 3 JSPF, 39" holes
Upper Gallup 5264-74 w/21 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
5375-5383'	300 gal. acid; 50.5 M lbs. sand.
	in 47.5 gals. gelled wtr.
5269-5274'	Repeat same treatment.

33.

PRODUCTION

Date First Production 11/1/79	Production Method (Flowing, gas lift, pumping - Size and type pump) Swab	Well Status (Prod. or Shut-in) WO tank battery (SI)
Date of Test 11/7/79	Hours Tested 8	Choke Size 2"
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate
		Oil - Bbl. 87
		Gas - MCF 249
		Water - Bbl. 57

34. Disposition of Gas (Sold, used for fuel, vented, etc.)

Used for fuel, will test for sales after recovery of load water

35. List of Attachments

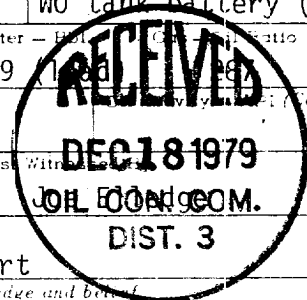
Copy of detailed completion history and Wellsite Geologic Report

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

SIGNED George B. Judd

TITLE Manager - Drilling & Prod.

DATE 12/17/79



This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or reopened well. It shall be accompanied by one copy of all electrical and radioactivity logs run on the well and a summary of all special tests conducted, including well stem tests. All depths reported shall be measured 140 ft. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 26 through 34 shall be repeated for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 116b.

Northwestern New Mexico

T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss	T. Chaco	T. Leadville
T. 7 Rivers	T. Devonian	T. Cliff House	T. Madison
T. Queen	T. Silurian	T. Menefee	T. Elbert
T. Grayburg	T. Montoya	T. Point Lookout	T. McCracken
T. San Andres	T. Simpson	T. Mancos	T. Ignacio Qizte
T. Ghorrieta	T. McKee	T. Gallup	T. Granite
T. Paddock	T. Ellenburger	Base Greenhorn	TD 6521'
T. Blinberry	T. Gr. Wash	T. Dakota	
T. Tobb	T. Granite	T. Morrison	
T. Drinkard	T. Delaware Sand	T. Todilto	
T. Abo	T. Bone Springs	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn.	T.	T. Chino	
T. Cisco (Bough C)	T.	T. Pennsian	
	T.	T. Penn. "A"	

No. 1, from to
 No. 2, from to
 No. 3, from to
 No. 4, from to
 No. 5, from to
 No. 6, from to

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.

No. 2, from.....to.....feet.

No. 3, from.....to.....feet.

No. 4, from.....to.....feet.

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation

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undated

WELLSITE GEOLOGIC REPORT

KENAI OIL & GAS INC.
NEW MEXICO STATE WELL No. 1
sw se 32-T24N-R8W
SAN JUAN COUNTY, NEW MEXICO

Prepared by: Dick Harnly
Consulting Petroleum Geologist

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OPERATOR:	Kenai Oil and Gas Inc
WELL:	New Mexico State, No. 1
CLASSIFICATION:	Wildcat; Dakota, Gallup
DRILLING CONTRACTOR:	Castle Drilling
MUD LOGGING:	Underwood Well Logging Service
WELLSITE GEOLOGY:	Dick Harnly, Consultant
MUD:	American Mud
LOGGING:	Welex
TESTING:	Halliburton

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FORMATION TOPS (FROM "E" LOGS)

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Pictured Cliffs	1820	5201
Chacra	2312	4709
Cliff House	3015	4006
Point Lookout	4240	2781
Mancos	4350	2671
Gallup	5250	1771
Greenhorn	6160	861
Dakota	6295	726
Total Depth(Driller)	6502	519
Total Depth(Strap)	6505	516
Total Depth(WELEX)	6521	500

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SUMMATION

MUD LOGGING

Mud Logging services were conducted by Underwood Well Logging Service from the bottom of the surface casing to total depth of 6502 feet.

Gas shows were encountered at 2330 (Chacra), 5246 and 5350 (Gallup) and 6330 (Dakota).

Samples were caught at lagged depths by members of the mud logging unit. Sample descriptions recorded on the mud log are by the geologist.

SAMPLE QUALITY

The quality of the samples varied from fair to poor due to several reasons. Of primary concern was the lack of constant pump pressure, causing variations in "bottoms up" time; secondary concern was low viscosity, resulting in questionable carrying nature of the mud.

While drilling at 3044 feet the light plant failed, the drilling engine died and the hole was circulated with the stand-by mud pump at low and undetermined pump pressure. Approximately five hours later the light plant was restarted and the drilling engine resumed operation, but because of the delay the drill pipe was stuck. The drilling contractor spotted twenty five barrels of oil to help work pipe free; about twenty one hours after the light plant failure the pipe worked

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free. Drilling continued with oil in the mud system until the mud was dumped at 3966 feet. Samples were contaminated and background gas was recorded on the hotwire gas instrument due to the oil in the system. The background gas generated by the addition of oil was heavier than pentanes thus allowing identification of formation gasses by both the chromatograph and by increases above the background gas on the hotwire instrument. (see mud log)

SHOWS

No shows of hydrocarbons were noted in the samples or recorded on the gas detection instruments in the Pictured Cliffs, Cliff House, Point Lookout, Mancos, Greenhorn or Graneros formations.

Gas heavier than pentanes was recorded coming from the Chacra. No evidence of shows was found in the samples. The gas recorded from this zone was first noted while drilling with low pump pressure and mixing mud with the stand-by mud pump from 2337 to 2350 feet. Gas from this zone continued accumulating in the mud system to a maximum of 125 units recorded at 2524 feet. At that depth the drilling operation was interrupted by forty five minutes of mud mixing allowing the gas to build up. This gas continued decreasing until masked by the addition of oil at the time of encountering stuck drill pipe. The determination of the point of origin of this gas is clouded by the varying pump pressures experienced during this interval.

The Gallup zones at 5246-54 feet and 5350-70 feet are the most

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encouraging encountered in this hole. The eight foot drilling break noted between 5246 and 5254 feet produced an increase of 355 units of gas over the background of 250 units. Chromatograph readings of Methane, Ethane, Propane and traces of Butanes and Pentanes were recorded. Samples from this zone consisted of slightly oil stained very fine grained sandstone displaying fair to a trace of good porosity and permeability. Good yellow-white fluorescence and good streaming cut fluorescence were both noted. The sandstone, being slightly calcareous, should react favorably to acid stimulation at completion time. The second Gallup zone 5350-70 apparently is more encouraging than the upper zone, as evidenced by a greater gas show (575 units over background) and by slightly coarser nature of the sandstone. Samples from this lower zone consist of sandstone, fine grained to a trace of medium grained, sub angular, white, some gray tan, argillaceous in part. The medium grained sandstone exhibits good porosity and permeability and a few secondary quartz crystal terminations. This zone shows very good bright yellow fluorescence and a good blue-white cut fluorescence. Two Drill-stem Tests were attempted over the interval 5229-69 feet; the first try failed to get deeper than 850 feet due to bridging conditions in the hole, the second attempt failed due the packer not seating.

The Dakota formation produced a gas show at approximately 6330. The point of origin of this gas is in doubt as lag time was confused

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by drilling with the stand-by pump being used on the hole with pump pressures varying between 200-500 psi and eventually increasing to a reported 800 psi. No shows of hydrocarbons were noted in the Dakota formation. Poor permeability and porosity were observed in the samples 6290-6325, but without stain, fluorescence or cut.

RECOMMENDATIONS

In future drilling operations it is suggested that a considerable reduction in operational expenses could be achieved by using a mud system in common use in the area; i.e. low solids, non-dispersed, with a water loss of 6-8 and a viscosity of approximately 38-40.

The credibility of the samples could be improved by insuring that the drilling contractor have adequate mud pumps capable of performing at a nearly constant pressure rate.

Kenai Oil & Gas Inc.
New Mexico State #1
SWSE Section 32, T24N, R8W
San Juan County, New Mexico

Elledge Consulting & Production Company

COMPLETION HISTORY

- 10-22-79 TD 6521' KB. Move in and rig up Action Well Service Rig #2. Receive 2 3/8" tubing from Fluor Oil Field Supply. Receive BOP and accumulator from Land & Marine Rental. Welded 4 1/2" belled nipple on casing.
- 10-23-79 TD 6521' Kb. Picked up 3 7/8" bit, 4 1/2" casing scraper, and 20C jts 2 3/8" tubing measuring 6520.07' and tagged PBTD at 6500' KB. Laid down 34 jts tubing. Pull rest of way out of hole. Rig up Dresser Atlas and ran CBL log from 6503' to 5900', 5600' to 5100', and from 2500' to 1700'. Ran and set Baker Drillable bridge plug at 5428' KB. SI for night. Total tubing on location 201 jts measuring 6553.07'. (Left in derrick 166 jts measuring 5403.95')
- 10-24-79 PBTD 5428' KB. Ran 166 jts tubing and tagged Bridge Plug at 5428' KB. Pulled 2 jts and pressure tested casing to 3500 psi, 5 min, OK. Rolled hole to 1% KCL water. Spotted 300 gallons 7 1/2% HCL. POOH. Rig up Dresser Atlas and perforated Lower Gallup 3 JSPF, 39" holes, from 5375-83'. Rig up Western and frack with 47,500 gallons 30# gelled 1% KCL water, containing 40,500# 20/40 sand and 10,000# 10/20 sand. AIR 30 bpm, Max trt pressure 2750 psi, Min trt pressure 1600 psi, Avg trt pressure 2000 psi. ISIP 600 psi, 15 min SIP 600 psi. Total to be recovered 1234 bbls. Left well SI overnight.
- 10-25-79 PBTD 5428' KB. SIP 275 psi. Open well through 2" to pit. Well blew hard for 10 minutes and started flowing load water at 14 BPH. Flowed 20 BLW in 2 hrs. Ran 166 jts with seating nipple one jt up and tagged sand at 5387' KB. Pulled 2 jts and landed 164 jts at 5347' KB. Seating nipple at 5316' KB. Made 35 runs from 1600' and recovered 175 BLW. FFL 1000'. Have fumes of gas. Final CP zero. SI for night. 1031 BLW yet to be recovered.
- 10-26-79 PBTD 5428' KB. SICP & TP zero. IFL 1600'. Made 57 runs in 10 hrs ending at 6 p.m. and recovered 202 BLW and trace of oil. FFL 5000'. Good blow of gas after each run. Final casing pressure 5 psi. Last hour would have skim of oil on quart fruit jar. SI for night. 829 BLW yet to be recovered.
- 10-27-79 PBTD 5428' KB. SITP 135 psi, SICP 5 psi. IFL 3000'. Show of oil on 1st run. Swabbed 10 hrs ending at 5:30 p.m. and recovered 8 BO and 41 BLW. FFL 5000'. Slight amount of gas. 788 BLW yet to be recovered. Ran Amerada BHP bomb and set at 5379' KB. Oil cut for 1st 4 hrs, 10%. Oil cut for last 6 hrs, 25%. SI for weekend.
- 10-28-79 Sunday-Crew off
- 10-29-79 PBTD 5428' KB. Pulled BHP bomb. SICP 50 psi, SITP 600 psi. Bled both sides to frack tank. POOH. Rig up Dresser Atlas and set retrievable bridge plug at 5300' KB. Rig up Western and fill hole with 50 bbls 1% KCL water, pressure tested to 3500 psi, 5 min, OK. Ran 162 jts tubing to 5274' and spotted 300 gallons 7 1/2% HCL. POOH. Perforated Upper Gallup 5264-74 with 21 holes. Fracked with 47,000 gallons 30# gelled 1% KCL water containing 40,500 lbs 20/40 sand and 10,000 lbs 10/20 sand. AIR 35 bpm. Max trt pressure 2850 psi, Min trt pressure 2550 psi, Avg trt pressure 2650 psi. ISIP 1500 psi, 15 min SIP 1100 psi. Total load to be recovered 1269 bbls. Left shut in overnight.

New Mexico State #1

SWSE Section 32, T24N, R8W

San Juan County, New Mexico

COMPLETION HISTORY CONTINUED

10-30-79 PBTD 5428' KB. SIP 450 psi. Opened well to pit through 2". Flowed estimated 40 BLW and died. Ran 162 jts tubing and seating nipple 2 jts up and tagged bridge plug at 5300'. Made 40 runs and recovered 160 BLW in 5 hrs ending at 5:30 p.m. FFL 3000'. Casing on vacuum. No show oil or gas. 1069 BLW yet to be recovered.

10-31-79 PBTD 5428' KB. SICP zero, SITP 20 psi. IFL 900'. Swabbed 9 hrs ending at 5 p.m. and recovered 195 BLW and 22 bbls oil for 10% oil cut. Final oil cut 25%. 874 BLW yet to be recovered. Final CP zero. FFL 5000'. SI for night. Slight gas.

11-1-79 PBTD 5428' KB. SICP 400 psi, SITP 275 psi. IFL 3000'. After 2 runs, flowed for 20 minutes solid fluid and died. Made 30 swab runs and recovered 22 BO and 33 BLW in 8 hrs ending at 4 p.m. Final oil cut 50%. Average for day 40%. FFL 5000'. Final casing pressure 150 psig. Ran BHP bomb at 4 p.m. SI for night. Good gas all day. Total load water to be recovered 841 bbls.

11-2-79 PBTD 5428' KB. SICP 400 psi, SITP 275 psi. Pulled BHP bomb. Pulled out of hole with tubing. Ran Baker retrieving head and Hydrastatic bailer and tagged sand at 5280' KB. Cleaned out to bridge plug at 5300' KB and retrieved same. POOH. Ran bailer with tubing open ended and tagged sand at 5387' KB and cleaned out to drillable bridge plug at 5428' KB. POOH and laid down bailer. Ran final production tubing as follows:

1	jt 2 3/8" tubing open ended	33.01'
	Standard seating nipple	1.00'
6	jts 2 3/8" tubing	197.67'
	Baker Anchor Catcher	3.10'
157	jts 2 3/8" tubing	5110.89'
	Sug 2 3/8"	8.18'
1	jt 2 3/8" tubing	29.25'
165	jts	5383.20'
	landed below KB	9.00'
	tubing landed at	5392.20' KB

Seating nipple at 5358.19' KB. Anchor set with 8,000 lbs tension at 5157.42' KB. Nipple down BOP and nipple up free. SI for night. Left on location 36 jts 2 3/8" tubing measuring 1182.15'.

11-3-79 PBTD 5428' KB. SITP 30 psi, SICP 175 psi. IFL 2500'. Swabbed 32 BO and 65 BLW in 6 hrs ending at 3 p.m. FFL 4300'. Good gas all day. Drained water from frack tank. SD for weekend. 776 BLW yet to be recovered.

11-4-79 Sunday- Crew off. 14 hr BHP on lower zone. 988 psi.

11-5-79 Monday- Crew off

11-6-79 PBTD 5428' KB. SICP 1100 psi, SITP 150 psi. Bled well down. IFL 2000'. Swabbed and flowed 40 BO and 14 BLW in 7 hrs ending at 3 p.m. Flowed 2 hours. FCP 425. 760 BLW yet to be recovered. Drained frack tank. SI for night. FFL 5000'.

11-7-79 PBTD 5428' KB. SICP 900 psi, SITP 125 psi. IFL 2500'. Made 2 runs and

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COMPLETION HISTORY CONTINUED

well kicked off and flowed for 45 minutes. Swabbed and flowed 19 BLW and 29 BO in 7 hrs. ending at 3 p.m. FFL 5000'. Fluid entry rate approximately 4 bbl/hr. Good gas all day. SI for night. 743 BLW yet to be recovered.

11-8-79

PBTD 5428' KB. SICP 850 psi, SITP 225 psi. Bled down casing and tubing and rig up to run rods. Wait on rods. Rods arrived at 4 p.m. Truck hauling rods got stuck 100 yds from location. SI for night. ---

11-9-79

PBTD 5428' KB. SICP 1100 psi, SITP 500 psi. Bled well down. Ran rods as follows:

	Axelson 2"X1 $\frac{1}{4}$ "X12'X13'X16' RHBC pump	16.00'
136	3/4" plain rods with Auxite boxes	3400.00'
20	3/4" scraped rods with Suxite boxes	500.00'
58	7/8" scraped rods with Auxite boxes	1450.00'
	7/8" scraped pony rod	2.00'
	1 $\frac{1}{4}$ "X16' polish rod w/1 $\frac{1}{2}$ " liner	16.00'
<u>214</u>		<u>5384.00'</u>

Spaced well out, stroked pump, good pump action. Ready for up stroke. Rig down rig. Job Complete. Left on location 2 7/8" scraped rods, 8'X7/8" scraped pony, 4'X7/8" scraped pony, 2'X7/8" scraped pony.