

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-101
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address. Northland Operating Company 3500 Oak Lawn, Suite 380, Lock Box 31 Dallas, Tx 75219-4398		¹ OGRID Number 149936
		¹ API Number 30-005-21154
⁴ Property Code 20414	⁴ Property Name Drickey Queen Sand Unit	⁴ Well No. 57

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
A	15	14S	31E		140'	North	330'	East	Chaves

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
H	15	14S	31E		2630'	North	330'	East	Chaves

⁹ Proposed Pool 1 Caprock Queen #8553 8551	⁹ Proposed Pool 2
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¹¹ Work Type Code N	¹¹ Well Type Code O	¹¹ Cable/Rotary R	¹¹ Lease Type Code P	¹¹ Ground Level Elevation 4276'
¹⁴ Multiple No	¹⁷ Proposed Depth 3100'	¹⁸ Formation Queen	¹⁸ Contractor Patterson Drilling	¹⁸ Spud Date August 9, 1998

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24#	380'	+200	surface
7 7/8"	5 1/2"	14#	+3000'	+250	surface

¹² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Northland Operating Company proposes to drill an injection pilot well 3100', then sidetrack a 3100' TVD and drill horizontal 2490' lateral. Northland will use fresh water to approximately 350', then will mud-up and condition hole with mud as necessary for catching samples, until TD.

BOP Program: BOP will be installed on the 8 5/8" casing and tested daily. Working pressure for the BOP is approximately 3000#.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

¹³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:

Sam L. Shackelford

Title:

Consultant

Date:

7-27-98

Phone:

505-623-6036

OIL CONSERVATION DIVISION

Approved by: ORIGINAL SIGNED BY CHRIS WILLIAMS
DISTRICT I SUPERVISOR

Title:

Approval Date:

AUG 12 1998

Expiration Date:

Conditions of Approval:

Attached ☐

227

ALC
MD

District I
PO Box 1900, Hobbs, NM 88241-1900
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-005-21154		1 Pool Code 8554		1 Pool Name Caprock Queen		
1 Property Code 20414		1 Property Name Drickey Queen Sand Unit			1 Well Number 57	
1 OGRID No. 149936		1 Operator Name Northland Operating Company			1 Elevation 4276	

10 Surface Location

UL or lot no. A	Section 15	Township 14S.	Range 31E.	Lot Idn	Feet from the 140'	North/South line North	Feet from the 330'	East/West line East	County Chaves
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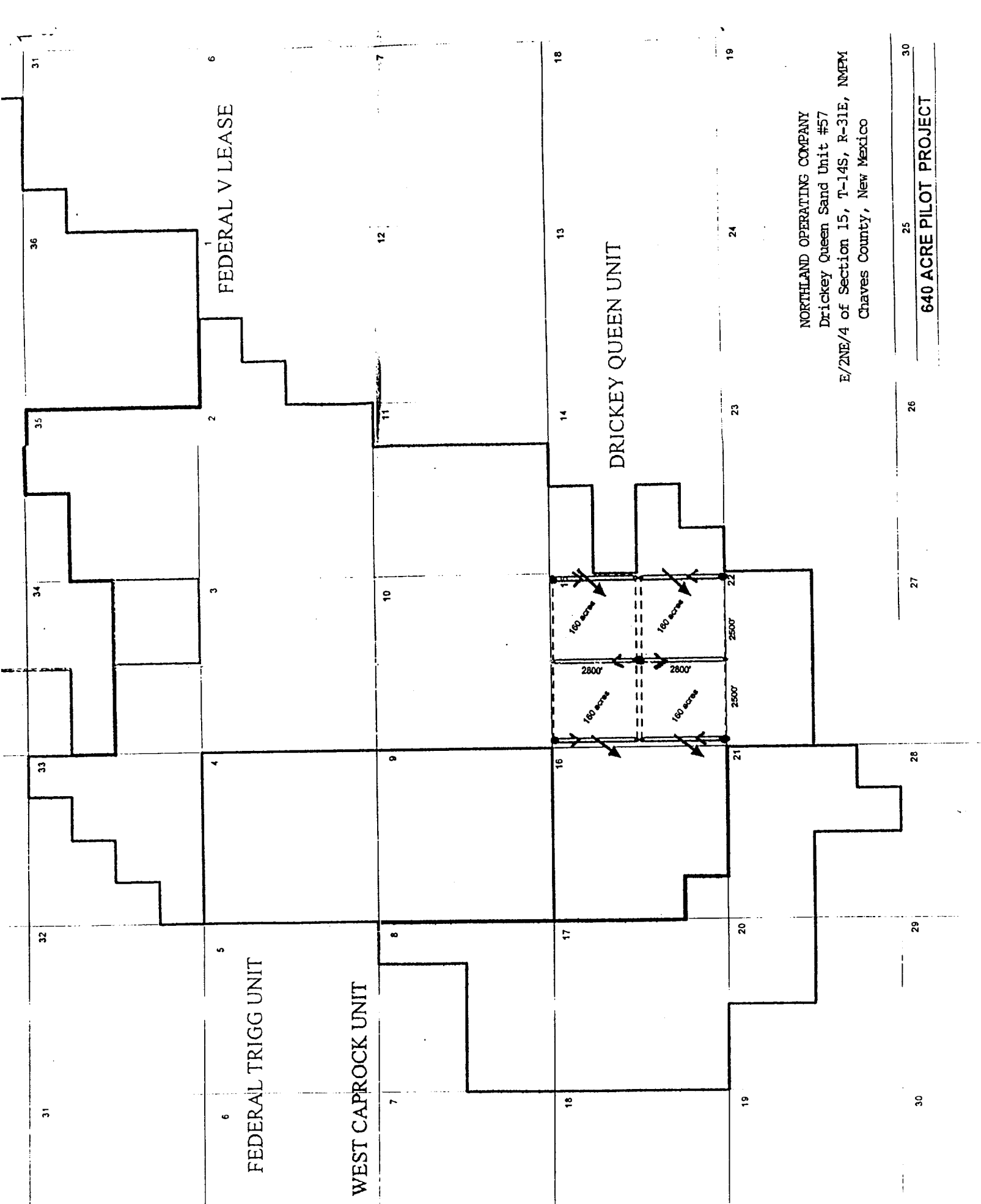
11 Bottom Hole Location If Different From Surface

UL or lot no. H	Section 15	Township 14S	Range 31E	Lot Idn	Feet from the 2630'	North/South line North	Feet from the 330'	East/West line East	County Chaves
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12 Dedica-d Acres 80.0	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

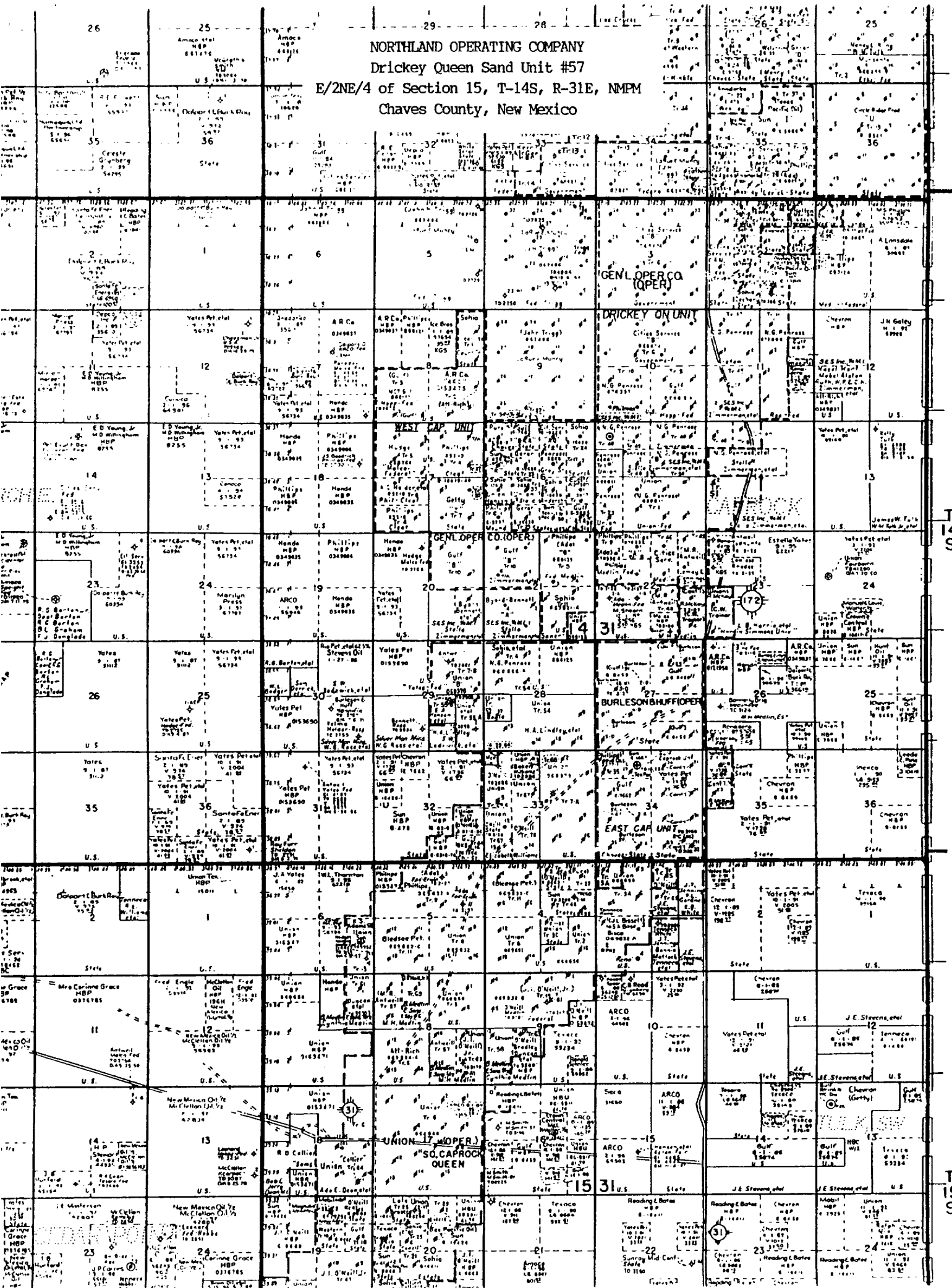
16				Injector Well	330'
					2460'
17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Sam L. Shackelford Printed Name Consultant Title 7-27-98 Date					
18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 7/2/98 Date of Survey Signature and Seal P.S. # Certificate Number					



NORTHLAND OPERATING COMPANY
Drickey Queen Sand Unit #57
E/2NE/4 of Section 15, T-14S, R-31E, NMPM
Chaves County, New Mexico

25 26 27 28 29 30
640 ACRE PILOT PROJECT

NORTHLAND OPERATING COMPANY
Drickey Queen Sand Unit #57
E/2NE/4 of Section 15, T-14S, R-31E, NMPM
Chaves County, New Mexico



T 14 S

T 15 S

Patterson Drilling Company

NORTHLAND OPERATING COMPANY

Drickey Queen Sand Unit #57

E/2NE/4 of Section 15, T-14S, R-31E, NMPM

Chaves County, New Mexico

Rig #55

11,500'

DRAWWORKS

Mid Continent U36

Brake: Parmac V-80

Totco Weight Indicator

Brewster 2 engine compound (w/390 Quincy)

BLOWOUT PREVENTERS

12" 3000# Shaffer Type E double ram, 12" 3000#
Hudril GK, 180 gal 5 station Koomey, Air/Electric,
4" 3000# manifold

ENGINES

Two Cat 3408 engines, 425 HP each

MUD SYSTEM

Two 650 bbl tanks and 1 200 bbl premix tank,
brandt 8-cone desilter w/5 x 6 centrifugal pump
w/3304 Cat engine

DERRICK

L. C. Moore, 131', 510,000# rated capacity

MUD HOUSE

SUBSTRUCTURE

L. C. Moore, 16' high, 250,000# set back
capacity, 375,000# casing capacity
KB - 14'

COMMUNICATIONS

24 hour direct cellular telephone

MUD PUMPS

Pump #1: Emsco DB550 w/Cat D379, 550 HP

Pump #2: Oilwell A700P w/Cat D379, 700 HP

OTHER EQUIPMENT

Blocks. BJ 200

Hook. BJ Unimatic 200

Swivel. Emsco 250

Rotary Table. Ideco 27 1/2" 175 Ton

Shale Shaker. Brandt dual tandem screen

Electrical Power. Two 3306 Cat diesels w/135
kW generators

Fresh Water Storage. Two 800 bbl tanks

Housing.

DRILL STRING

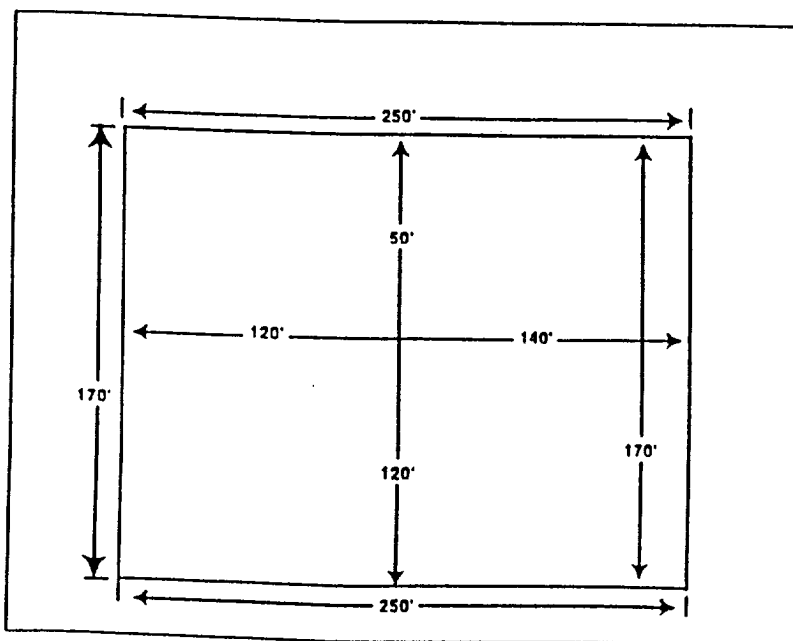
Grade E, 4 1/2", XH drill pipe

30 - 6 1/2" x 2 1/4" 30' long drill collars

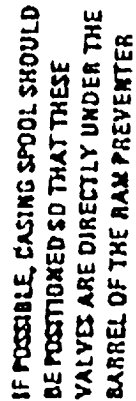
14 - 8" x 2 1/4" 6 5/8 Reg drill collars

Other sizes of drill pipe and drill collars are
available

"Hole Requirements will dictate actual Reserve Pit size (TOOLPUSHER SHOULD BE CONSULTED)"



Rig 55

[illegible]

Beyond Edge of Derrick Floor

ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED

9/1/2000
ELF