

ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL SITE GEOLOGY — MUD LOGGING

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

COMPANY *Dyco Petroleum Corp*

WELL *Morrell #1*

FIELD *Wildcat*

ELEVATION *7770 GL*
7782 KB

LOCATION *Sec 12 T13S R92W*

COUNTY *Delta*

STATE *Colorado*

DRILLING FLUID *Chem/Gel*

FROM

TO

DEPTH LOGGED

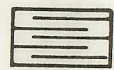
345

DATE LOGGED

9-17-81

ENGINEERS

William Nagel



SHALE



DOLOMITE



COAL

OIL SHOW



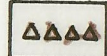
TRACE



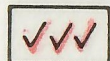
CORE NO.



SANDSTONE



CHERT



ANHY-GYP



FAIR



DST NO.



LIMESTONE



SALT



Siltstone



GOOD



DEVIATION

NB - NEW BIT
NR - NO RETURNS
CO - CIRCULATE OUT
NS - NO SAMPLE
TG - TRIP GAS

DRILLING RATE IN
MIN./FT.

LITHOLOGY

INTER-
PRETIVE

DEPTH

PERCENT-
AGE

OIL
SHOW
T F G

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

TOTAL GAS — METHANE —

ETHANE — BUTANE —
PROPANE — PENTANE —

REMARKS

WT VIS WL PH CKE

SPUD 9-13-81
BIT # INTE 345
made 3/5 in 1 1/2 hrs
set 345 ft 11 1/2"
surface casing
BIT 2 SEC 08

350

400

25 50 75 100 200 500 1000 2000
5 10 50 100 1 10 1 10

One-Mon Logging Unit
Commence Logging 9/17/81

30 ft samples Chem/Gel mud

SS wh-lty rf-fgr
pcnt msst sbng-sbrd
ag

SH lty oky sft
blky-pty occ carb
coal

200 lb Grubbe
3 min

WELL NAME:

DRILLING RATE IN MIN./FT.				LITHOLOGY		OIL SHOW	CHROMATOGRAPH HYDROCARBONS IN PPM						REMARKS								
				INTER- PRETIVE	DEPTH	PERCENT- AGE	T F G	TOTAL GAS — METHANE — — —		ETHANE — — — PROPANE — — —	BUTANE — — — PENTANE — — —										
5	10	15	20					25	50	75	100	200	500	1000	2000	WT	VIS	WL	PH	CKE	
								5m	25m	50m	100m	1m	10m	100m	1000m	Coal					
					50											SH L Tgy sft blk, sity					
																SS wh-1tgy vfy					
																pemt msrt sbang-sbrd					
																arg					
					500											SS wh ocl stp fgr memt					
																m-wsrt sbang-sbrd purp.					
																SH L T-mgy sft-fm blk.					
																Coal					
																Coal					
					50											SS					
																SS wh-1tgy vt-fgr p-nemt					
																p-msrt sbang-sbrd ag					
					600											SH mgy-dkgy bcn sft-fm					
																blk-pity					
																SS 1tgy vfy memt psrt					
					50											sbang-sbrd arg					
																SH pt-mgy sft-fm					
																blk					
					700											TR Coal					
																SS wh sup vt-fgr					
																m-wemt msrt sbang-sbrd					
					50											SS wh-clr vt-mgy					
																uncons - memt msrt					
																sbang-sbrd					
					800											SS wh ocl stp vt-fgr memt					
																msrt sbang-sbrd blk pl					

WOB 1000
RPM 70/80
AP 1150

9/12/81

Coal
SH 1tgy sft blk sity
SS wh-1tgy vfy
pemt msrt sbang-sbrd
arg
SS wh ocl stp fgr memt
m-wsrt sbang-sbrd purp.
SH 1t-mgy sft-fm blk.
Coal
Coal
SS
SS wh-1tgy vf-fgr p-memt
p-msrt sbang-sbrd arg
SH mgy-dkgy bam sft-fm
blk-pity
SS 1tgy vfy memt msrt
sbang-sbrd arg
SH 1t-mgy sft-fm
blk
TR Coal
SS wh s+p vf-fgy
m-wemt msrt sbang-sbrd
SS wh-clr vf-mgy
uncons-memt msrt
sbang-sbrd
SS wh ocl stp vf-fgr memt
msrt sbang-sbrd blk pl

WELL NAME:

DRILLING RATE IN MIN./FT.		LITHOLOGY		OIL SHOW		CHROMATOGRAPH HYDROCARBONS IN M=1000 PPM				REMARKS				
		INTER- PRETIVE	DEPTH	PERCENT- AGE	T F G	TOTAL GAS — METHANE ———	PROPANE — — —	BUTANE ———	PENTANE.....	WT	VIS	WL	PH	CKE
5	10	15	20											
			50											SH m-dkgy frm blkly occ carb occ pl fgs
			900 0-1/2°											Coal SS ltyy vfgt wemt msat sbang-sbrd org slst ltyy frm blkly TR Coal SH m-dkgy sft frm blkly
			50											9.1 39 14.4 11.0 2/32 Coal SS wh occ srp vf-fgr wemt msat sbang-sbrd
			1000											Coal SH m-dkgy frm blkly-plty
			50											SS wh vf-fgr mcmt wsrt. sbang-sbrd poor por TR LS ltyy das org
			1100											Coal slst dkbrn frm blkly SH dkbrn sft-frmbkly - plty carb io slty
			50											SS wh occ srp v f-fgr mcmt msat sbang-sbrd poor poor

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

INTER-
PRETIVE

DEPTH

PERCENT-
AGEOIL
SHOW
T F G

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

TOTAL GAS — METHANE — — — —

ETHANE — — — — BUTANE — — — —
PROPANE — — — — PENTANE — — — —

REMARKS

WT

VIS

WL

PH

CKE

1200

50

2-10

1300

50

1400

50

1500

50

By pore solution

Coal

SS wh srp vf-fgr mcmnt
msrt sbang-sbrd poor porSS wh srp vf-fgr ocmgr
p-mcmnt msrt sbang-sbrd
poor por

-Lost Circ 400 BBL

SH it-mgy tan sft-fm

SIT it mgy fm blk.

SS wh-ltgy vfgr
mcmnt msrt sbang-sbrd
ang TT

SH mcmnt-dtgy fm blk, s

SS it-mgy fm blk.
Lmy sity

SH dkgy fm blk-plt

SH dkgy fm blk-plt

8.8 36 8.8 11.0 1/32

SS wh-clr vf-fgr uncons
p cmnt msrt ang-sbrd

SH dkgy fm blk-plt

WOB 2.5
RPM 25
HP 1250

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

INTER-
PRETIVE

DEPTH

PERCENT-
AGEOIL
SHOW
T F G

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

TOTAL GAS — METHANE — — — —

ETHANE — — — —

BUTANE — — — —

PROPANE — — — —

PENTANE

REMARKS

↓
WT↓
VIS↓
WL↓
PH↓
CKE

SH dkgy fm blk-pty

SH dkgy fm blk-pty

silt mgy fm blk ang

SS wh vt-fgr ocmgr
p-memt msrt sbng-sbrd
cly fl

SH dkgy fm blk pty

SS wh ocm str vt-fgr
mgy p-memt ang-sbrd
cly fl

SH dkgy fm blk

silt mgy fm blk

SH m-dkgy fm blk
silty

8.9 49 8.8 11.0 3/32

SH m-dkgy fm blk
sl sily
Run Logs at 1921'

5 10 15 20

1600

50

0 3/4"
1700

50

1800

50

1900

WOB 20
RPM 25
PP 1350

9/2/81

WELL NAME:

DRILLING RATE IN MIN./FT.	LITHOLOGY		OIL SHOW T F G	CHROMATOGRAPH HYDROCARBONS IN PPM				REMARKS				
	INTER- PRETIVE	DEPTH	PERCENT- AGE	TOTAL GAS —	METHANE — — —	ETHANE — — — PROPANE — — —	BUTANE — — — PENTANE — — —	WT	VIS	WL	PH	CKE
0 0 15 20		50										
7/20/61		2000										
		0-10										
		50										
		2100										
		50										
		2200										
		50										
		2300										

SS wh-clr vfg
uncons -pent msrt rd-sh

SH Dkgy frm blk

SH m-Dkgy frm blk

SH m-Dkgy frm blk

SH Dkgy frm blk

9.0 44 8.2 10.0 3/8
Set 8 5/8 csg at 2186
Drill out with air

SH Dkgy frm blk

TR ls ltgy dms org

SH Dkgy frm blk

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

INTER-
PRETIVE

DEPTH

PERCENT-
AGEOIL
SHOW
T F G

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

TOTAL GAS — METHANE — — —

ETHANE — — —
PROPANE — — —BUTANE — — —
PENTANE — — —

REMARKS

WT
↓VIS
↓WL
↓PH
↓CKE
↓0 340
50

2400

50

2500

50
0 1 1/4

2600

50

SH dkgy fm blk

SH dkgy fm blk,
sle lm

SH dkgy fm blk

SH dkgy fm blk
sl sltySH dkgy fm blk
sltySH dkgy fm blk
slty, sandy

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

OIL
SHOW

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

INTER-
PRETIVE

DEPTH

PERCENT-
AGE

T F G

TOTAL GAS — METHANE — — — —

ETHANE — — — —

BUTANE — — — —

PROPANE — — — —

PENTANE

REMARKS

WT

VIS

WL

PH

CKE

2700

50

50

2800
0-10

50

2900

50

3000

2 1/4"

50

NOTE

NOTE

SH dkgy fm-hd
blk sltySH dkgy fm-hd
blk sl slty occ 1mSH dkgy fm-hd blk sl
sltySH dkgy fm-hd
blk sl sltySH dkgy fm blk
sltySH dkgy fm blk
sl slty

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

INTER-
PRETIVE

DEPTH

PERCENT-
AGEOIL
SHOW
T F G

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

TOTAL GAS — METHANE — — —

ETHANE — — —

BUTANE — — —

PROPANE — — —

PENTANE

REMARKS

↓
WT↓
VIS↓
WL↓
PH↓
CKE

3100

50

3200

50

3300
2 1/2

50

3400

TG

SH dkgy fm blk, sl
sity

SH dkgy fm blk,

SH dkgy fm blk,

SH dkgy fm blk,

SH dkgy fm blk,

TR Bont 17gy Pity

9/50 ft

WOB 570
RPM 60
175

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

INTER-
PRETIVE

DEPTH

PERCENT-
AGEOIL
SHOW
T F G

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

TOTAL GAS — METHANE — — —

ETHANE — — —

BUTANE — — —

PROPANE — — —

PENTANE

WT

VIS

50

3500

0-30

50

0-20

3600

50

3700

30

3800

TR Bent clay pit,
SH pkgy from blkst sltstSH pkgy from blkstSH pkgy from blkstSH pkgy from blkst sltstSH pkgy from blkstSH pkgy from blkst sltstSH pkgy from blkstLOG 5/10
20/83
175

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

INTER-
PRETIVE

DEPTH

PERCENT-
AGEOIL
SHOW

T F G

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

TOTAL GAS — METHANE — — — —

ETHANE — — — —

BUTANE — — — —

PROPANE — — — —

PENTANE

REMARKS

↓
WT↓
VIS↓
WL↓
PH↓
CKE

0-3 1/4"

50

3900

DTG

50

DTG

4000

SH Dkgy from blk sl
Sndy

50

SH Dkgy from blk

0-5 3/4"

4100

SH Dkgy from blk

50

DTG

WOB 5/16
20/32
PS

4/22/81

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

OIL
SHOW

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

REMARKS

INTER-
PRETIVE

DEPTH

PERCENT-
AGE

T F G

TOTAL GAS — METHANE — — — —

ETHANE — — — —

BUTANE — — — —

PROPANE — — — —

PENTANE

WT

VIS

WL

PH

CKE

NR 512 F-8
ST 4 H Mole
2003 FV 10/24

4200

0-70

50

0-70

4300

0-70

50

WOB 35
RPM 700
PP 175

4400

0-70

50

0-7 1/2

4500

0-7 1/2

50

Abnt Bent Ltgy, plty,
SH Dkgy from blk.

TR Bent Ltgy, plty,

SH Dkgy from blk.

TR Bent Ltgy, plty

SH Dkgy from blk.

TR Bent Ltgy, plty

SH Dkgy from blk.

TR Bent Ltgy, plty

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

INTER-
PRETIVE

DEPTH

PERCENT-
AGEOIL
SHOW
T F G

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

TOTAL GAS — METHANE — — — —

ETHANE — — — —

BUTANE — — — —

PROPANE — — — —

PENTANE

REMARKS

↓
WT↓
VIS↓
WL↓
PH↓
CKE

9/30/81
WOB 3/4
RPM 60/20
PP 175
AIR 2000

10/1/81
WOB 3/4
RPM 80
PP 180
AIR 2000

5 1/2"

4600
7 1/2

50

7 1/2

4700

8

50

7 3/4
4800

50

4900

10

2.5 50

DTG

MCA

DTK

DTG

DTG

CG

CG

CG

CG

SH DK GY FRM
BLKYDrill Pipe ^{Twisted,} ~~Ated,~~ fish pipe onSH DK GY CALC
FRM BLKY

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

OIL
SHOW

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

REMARKS

INTER-
PRETIVE

DEPTH

PERCENT-
AGE

T F G

TOTAL GAS — METHANE — — — —

ETHANE — — — —
PROPANE — — — —BUTANE — — — —
PENTANE — — — —

WT

VIS

WL

PH

CKE

10/2/81
WOB 3/5
RPM 20/90
PP 180
~~HTC~~
AIR 2000

BITH 5
FTCH 533
HRS 60-14
BITH 5
HTC 533

10/3/81
WOB 5/10
RPM 20/90
PP 130
AIR 2000

SLTST

SH

SLTST

1/2

WELL NAME:

DRILLING RATE IN
MIN./FT.

LITHOLOGY

OIL
SHOW

CHROMATOGRAPH HYDROCARBONS IN PPM

M=1000 PPM

REMARKS

INTER-
PRETIVE

DEPTH

PERCENT-
AGE

T F G

TOTAL GAS — METHANE — — — —

ETHANE — — — —

BUTANE — — — —

PROPANE — — — —

PENTANE — — — —

WT

VIS

WL

PH

CKE

