

WESTERN DECALTA PETROLEUM LIMITED

Report on a Seismic Survey  
of the

DAHADINNI AREA

N.W.T. PERMIT 5361

D.I.A.N.D. PROJECT NO. 19-6-5-70-3

WESTERN DECALTA PETROLEUM LIMITED

Report on a Seismic Survey  
of the

DAHADINNI AREA  
N.W.T. PERMIT 5361

OPERATOR - WESTERN DECALTA PETROLEUM LIMITED

CONTRACTOR - CATALINA & WESTERN GEOPH. (SIGMA)

D.I.A.N.D. PROJECT NUMBER - 19-6-5-70-3

Submitted by

*Paul Patterson*

Date

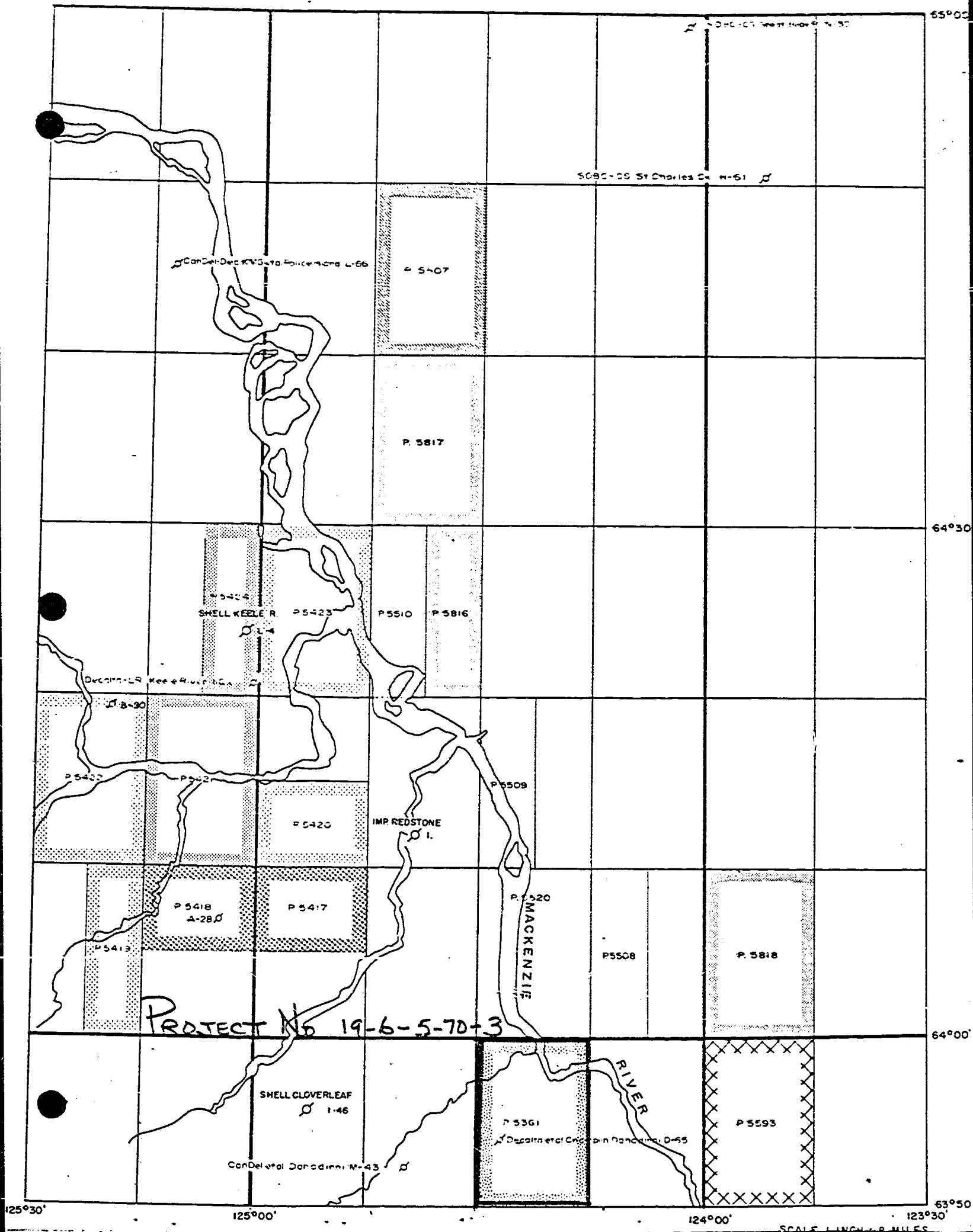
*March 13/73*



## C O N T E N T S

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ENCLOSURES: Surface Elevations P.5361  
Reflection time Middle Devonian  
Hume Formation P.5361



STATISTICAL DATA

|             |                    |            |        |
|-------------|--------------------|------------|--------|
| PRODUCTION: | Total mileage      | <u>37</u>  |        |
|             | Total shots        | <u>444</u> |        |
|             | Average production | <u>1</u>   | mi./d. |
| Downtime -  | Weather            | <u>1</u>   | days   |
|             | Equipment          | <u>2</u>   | days   |

EQUIPMENT:

Complete track seismic crew consisting of:

|          |                    |
|----------|--------------------|
| <u>1</u> | Recording unit     |
| <u>2</u> | Line unit          |
| <u>1</u> | Shooting unit      |
| <u>1</u> | Survey unit        |
| <u>1</u> | Party manager unit |
| <u>4</u> | Drills             |
| <u>2</u> | Bulldozers         |
| <u>1</u> | Camp               |

Instruments DFS III

PERSONNEL:

|          |                |
|----------|----------------|
| <u>1</u> | Supervisor     |
| <u>1</u> | Party Manager  |
| <u>1</u> | Computer       |
| <u>1</u> | Observer       |
| <u>1</u> | Shooter        |
| <u>1</u> | Surveyor       |
| <u>4</u> | Line helper    |
| <u>4</u> | Drillers       |
| <u>1</u> | Mechanic       |
| <u>3</u> | Camp Personnel |

Surveying Method

Transit

FIELD PROCEDURES

|                     |                          |
|---------------------|--------------------------|
| Recording system    | <u>DFS III</u>           |
| Source              | <u>Dynamite</u>          |
| Spread Geometry     | <u>1265-55-0-55-1265</u> |
| Number of Traces    | <u>24</u>                |
| Group Interval      | <u>110</u>               |
| Shotpoint Interval  | <u>440</u>               |
| Fold                | <u>300 %</u>             |
| Geophones per group | <u>9</u>                 |
| Source size         | <u>10</u>                |
| Hole depth          | <u>45'</u>               |
| Field Filter        | <u>18/124</u>            |

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DATA PROCESSING:

Structure section to datum of 700' ASL.

Replacement velocity 8,000'/sec. Bandpass filter

18-25/55-60. Time domain deconvolution 44 ms operator

length window 0.35-1.20 sec. whitening factor of 1.8

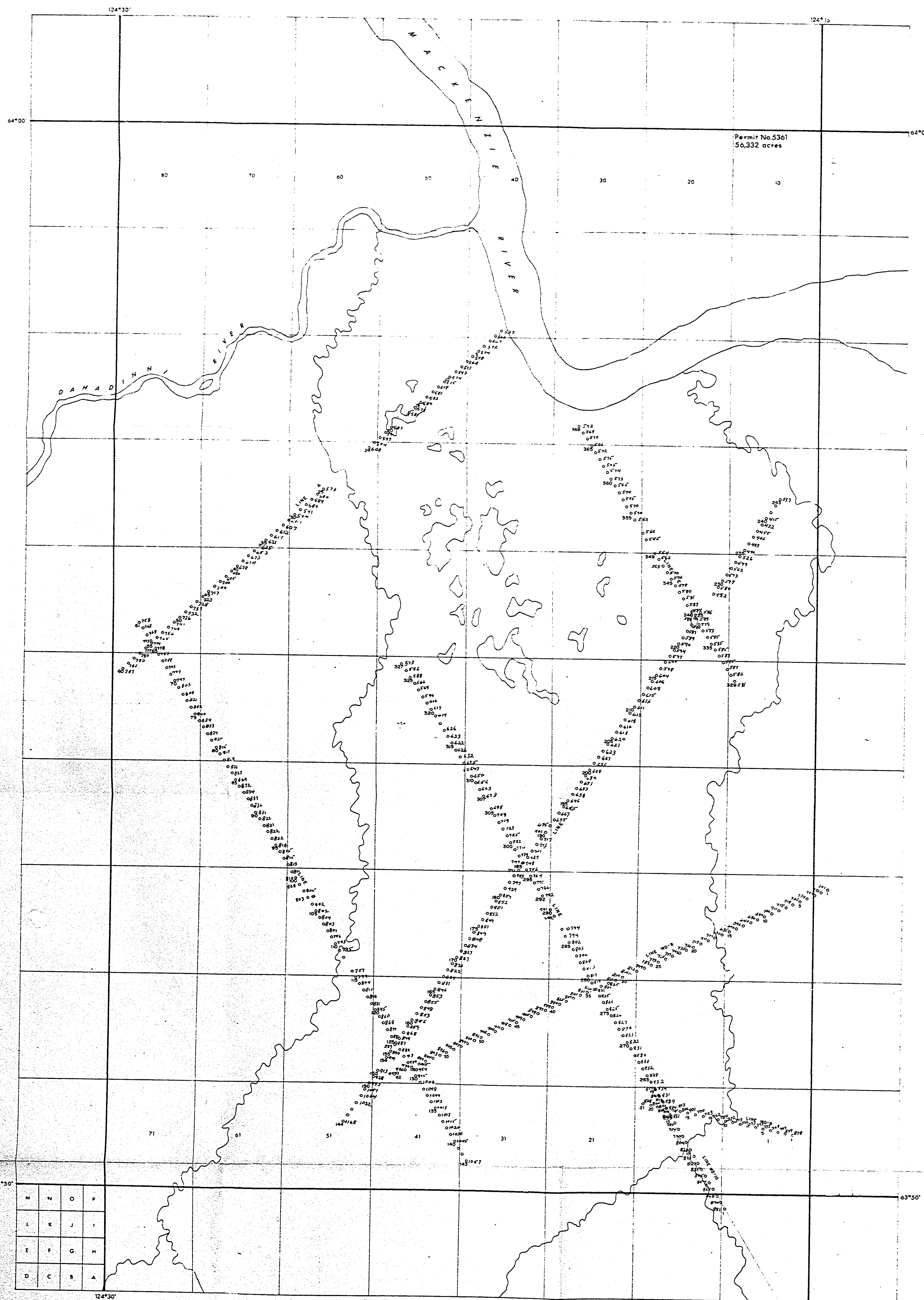
300% stack.

RESULTS:

Record quality was generally good except close to the river.

A reflection time map was made on the Middle Devonian Hume Formation.





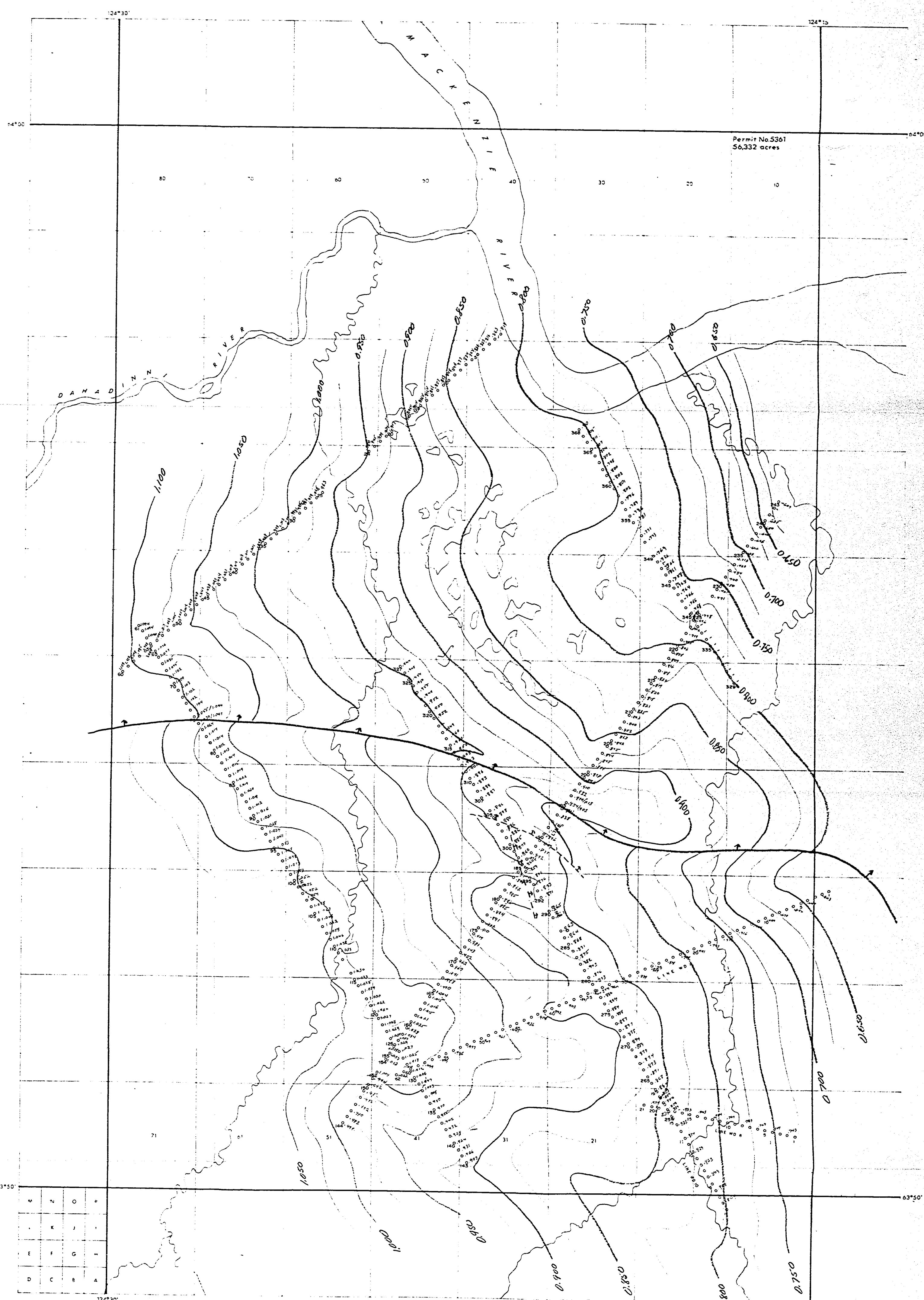
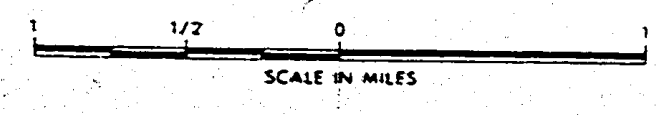
COORDINATE TABLE  
C.U.T.M. Values Ref. Mer. 123°00'00"

| LATITUDE    | LONGITUDE    | NORTH        | WEST      |
|-------------|--------------|--------------|-----------|
| 64° 00' 00" | 124° 15' 00" | 23,292,479.0 | 200,649.9 |
| 64° 00' 00" | 124° 30' 00" | 23,293,344.6 | 240,774.7 |
| 63° 50' 00" | 124° 15' 00" | 23,231,536.5 | 201,044.2 |
| 63° 50' 00" | 124° 30' 00" | 23,232,406.0 | 242,207.9 |

WESTERN DECATAL PETROLEUM LIMITED

*Surface Elevation*

DAHADINNI AREA  
NORTHWEST TERRITORIES



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*Surface Elevation*

DAHADINNI AREA  
NORTHWEST TERRITORIES



*Assumed Town  
To be Western 12° West*

*Permit No. 5361  
Hone Tui*

*In Jan. 1900 122.4. Ref. 124 16,000' Sea*



