PROPOSED DALY UNIT NO. 20

APPLICATION FOR ENHANCED OIL RECOVERY WATERFLOOD PROJECT

LODGEPOLE FORMATION

DALY, MANITOBA

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Corex Resources Ltd.

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INTRODUCTION

The Daly portion of the Daly Sinclair Field is situated in Townships 8 to 11 Ranges 27 to 29 W1M and was developed in the 1950's with vertical wells. Technological advances in drilling and completion techniques, specifically with respect to horizontal wells, have revived field activity in this area. The proposed unit area lies between Daly Unit No. 1 and Daly Unit No. 3 in which Corex is the licensed operator and sole working interest owner. In October 1952, the first two (2) wells were drilled within the proposed unit and produced oil: 100/14-03-010-28W1 & 100/02-10-010-28W1. This success encouraged the drilling of more vertical wells and by August 1953 an additional six (6) vertical wells were drilled and placed on production. In August 2009 the last vertical well was drilled and put on production. Successful horizontal well results surrounding the proposed unit resulted in Corex drilling eight (8) horizontal wells within the proposed unit boundary as of April 2019. All the wells for the full development plan have been drilled within the unit.

Corex as operator and sole working interest owner is proposing a unit be created which will include the following lands: Lsd's 11 and 14 of Section 3 and Lsd's 1, 2, 3, 6, 7 and 8 of Section 10, all in Township 10 Range 28W1M. Consistent with the reservoir characteristics of the offsetting lands, Corex believes the potential exists for incremental production and reserves from an Enhanced Oil Recovery (EOR) waterflood project in the Lodgepole formation. As of April 2019, the proposed application area contained eighteen (18) wells which status can be broken down as follows: Eight (8) horizontal Lodgepole wells within the proposed unit boundary, One (1) horizontal Lodgepole well that is drilled along the northern Unit boundary and nine (9) vertical wells (7 abandoned, 1 shut-in, 1 producing). We anticipate converting some of the producing Lodgepole horizontal wells into injectors when implementing the EOR waterflood project, however, our plan would be to produce any newly drilled wells for at minimum one (1) year before such conversion. Corex hereby applies to establish Daly Unit No. 20 and implement an EOR Waterflood Project within the Lodgepole formation (Figure 1).

The proposed Daly Unit No. 20 falls within the Daly Sinclair Lodgepole Pool (Figure 2).

SUMMARY

1. The proposed Daly Unit No. 20 will include the Lodgepole formation in eight (8) legal subdivisions (Lsd's) and eighteen (18) wells which status can be broken down as follows: Nine (9) horizontal Lodgepole wells, (8 fully within the unit, and 1 partially within the unit) and nine (9) vertical wells (7 abandoned, 1 shut-in, 1 producing) (Figure 1).

2. The original oil in place (OOIP) for the proposed Daly Unit No. 20 is calculated as 1,517 10^3m^3 (9,543 Mbbl), for an average of 189.6 10^3m^3 (1,193 Mbbl) per LSD.

3. Cumulative production in the proposed Daly Unit No. 20 to the end of April 2019 is 105.7 10^3m^3 (665.1 Mbbl) of oil. This represents a 7.0% recovery factor of the total OOIP.

4. The first production began in October 1952. Further drilling of vertical wells resulted in an early peak production in August 1953. In April 2019, with the drilling and production of the last horizontal well the proposed Daly Unit No. 20 reached a peak of 69.7 m^3/d (438 b/d), or an average of 7 m^3/d (44 b/d) per well, with a 34% oil cut at the time, (Figure 3).

5. The Estimated Ultimate Recovery (EUR) of oil on primary production within the proposed Daly Unit No. 20 through the use of type curves and a section model is 226.9 10^3m^3 (1,427 Mbbl), with 121.2 10^3m^3 (762.1 Mbbl) remaining as of April 2019. The Estimated Ultimate Recovery Factor (EURF) on primary production would be 14.9% of the total OOIP within the Lodgepole section.

6. With the implementation of a waterflood within the Middle and Lower Daly members of the Lodgepole formation, incremental reserves of 95.4 10^3m^3 (600.3 Mbbl) are expected while the incremental recovery factor is expected to be 6.29% for a total recovery factor of 21.2% for the entire Lodgepole section.

7. The development plan will be to continue producing the existing wells for a time period before conversion to injection to optimize primary production. Horizontal wells will be converted into water injectors to improve the ultimate recovery within the proposed unit (Figure 4). Timing of the conversions is contingent upon the approval of the unitization and EOR waterflood application. All recently drilled horizontal wells in the proposed Daly Unit No. 20 have been completed using multi-stage hydraulic fracturing.

GEOLOGY

Stratigraphy

The Lodgepole formation in the proposed Daly Unit No. 20 conformably overlies the hydrocarbon-bearing Bakken formation. It was deposited in a gently sloping carbonate ramp setting and has been subdivided by Corex into six laterally continuous, shallowing upwards cycles. In ascending order, the sequence consists of two non-reservoir cycles: the Basal Limestone and the Cromer Shale which are overlain by four reservoir cycles: the Cruikshank Crinoidal, Lower Daly, Middle Daly and Flossie Lake. The Lodgepole formation is unconformably overlain by the red silts and shales of the Lower Amaranth (Spearfish / Red Beds) and the anhydrites and shales of the Upper Amaranth which forms the top seal for the hydrocarbon system. The stratigraphy of the Lodgepole formation is shown on the type well (100/02-10-10-28W1/00) and a structural section which runs through existing vertical well control in and around the proposed unit (see Appendix I with Cross-Section from 14-3 to 2-10 to 8-10). The majority of original 1950's era verticals were cored, so there is ample offsetting core and log data to assist in the ongoing development of the Lodgepole formation.

Fluid Contacts

Over sixty years of production combined with regional mapping done by Corex has indicated the Lodgepole system oil – water contact is at -290m SS, which is downdip from the proposed Daly Unit No. 20.

Sedimentology

Starting at the base of the Lodgepole section and working upwards, the first cycle immediately overlying the Bakken formation is the Basal Limestone (not penetrated in the 02-10-010-28W1 type log or any of the other verticals in the proposed Daly Unit No. 20 in Appendix I). The Basal Limestone is a basinal argillaceous limestone with traces of fossil hash and chert nodules. This unit is not prospective and is capped by an argillaceous marker bed.

The next cycle, the Cromer Shale (again not penetrated in the 02-10-010-28W1 Type Log) is a basinal lime-mud consisting of tan to light brown to maroon-colored, occasionally dolomitic limestone with minor anhydrite, grey-green shale and very fine quartz siltstone components. The Cromer Shale is non-reservoir and is capped by a light to medium grey shale.

The overlying Cruikshank Crinoidal (754.7m-761m KB at the 02-10-010-28W1 type well location), is the first reservoir quality cycle deposited within the Lodgepole formation. The Crinoidal is characterized by bioclastic to biofragmental wackestones to grainstones. Abundant crinoid fragments and shallower-water shell debris has been transported downdip in submarine carbonate channels that have incised the underlying Cromer lime muds.

With minimal actual penetrations of the Crinoidal within the proposed Daly Unit No. 20 area, adjacent well control indicates the Crinoidal isopach ranges from 4 to 10m thick just outside the proposed unitized lands. Using a 6% porosity cutoff the average porosity ranges from 8-10% with permeabilities from 3-34mD. Using the same cutoff for logs as for core, the net pays range from 0.9 to 4.4m through and around the proposed Daly Unit No. 20 acreage (Appendix III).

The Lower Daly (742.5m-754.7m KB at the 02-10-010-28W1 type well location) is the next shallowing upwards reservoir cycle and grades from a tan to light brown lime mudstone into grainy bioclastic wackestones to packstones. It is occasionally argillaceous with traces of pyrite and has biofragment rich dolomite. Deposition is in an upslope higher-energy fairway where most of the matrix has been winnowed out, preserving better reservoir both vertically and laterally. The Lower Daly, using a 6% core/log cutoff, has 9-12% porosity and an isopach up to 13m with pays ranging from 3 – 7.4m and permeabilities from 1.8-15.3mD (Appendices VII and IX). Historical production has been obtained without fracture stimulation, but oil rates and recoveries have been positively impacted by stimulation.

The Middle Daly (733.7m-7742.5m KB at the 02-10-010-28W1 type well location) is a tan, partially recrystallized very fine to fine slightly dolomitic biofragmental wackestone that grades to a cryptocrystalline mudstone with minor anhydrite and shale. It has a very distinctive lower

resistivity profile as result of higher bound water, yet there have been high oil cuts for decades out of this zone. Deposition of this shallowing upward sequence occurred in a more restricted marine environment than the underlying Lower Daly. The Middle Daly isopach ranges from 9m to 12m in thickness over the proposed unit (Appendix X). Using a 6% cutoff the average porosities range from 8-11% and permeabilities from 0.7-4.2mD with net pays from 2.9-5m. (Appendices XI and XIII).

Finally, the last reservoir cycle within the Lodgepole is the Flossie Lake (720.8m-733.7m KB at the 02-10-010-28W1 type well location). The base of which is a dolomitic limestone that then grades upward into a thinly interbedded dolomite and anhydrite. This is indicative of deposition in the uppermost shallow evaporitic ramp setting. This interval is a light to medium brown, horizontally laminated, microsucrosic dolomite interbedded with dense, white anhydrite beds. The uppermost 3 to 4m of the Flossie Lake is dominated by anhydrite and contains only minor oil stained dolomite. The Flossie isopach is 9 to 17m in thickness (Appendix XIV); using a 6% core/log cutoff the net pay is 2.4 to 6.4m, permeability of 5.3mD and porosities from 10-12% (Appendices XV and XVII). The juxtaposition of reservoir quality dolomites with ductile anhydrite laminae additionally complicates stimulation of this reservoir interval.

Structure

Structure within the proposed Daly Unit No. 20 area primarily reflects deposition on a carbonate ramp-margin with established regional trends dipping down to the southwest into the Williston basin. (see Appendices XVIII through XXI for structural maps of each reservoir cycle).

Localized salt dissolution has modified this regional trend in certain areas. For example, in section 16-10-28W1M there is a salt collapse which was infilled during Flossie deposition with ~25m of interlaminated oil stained dolomite and anhydrite. These dissolution events do not appear to represent continuous barriers to lateral fluid flow within the reservoir and do not appear to interrupt the lateral continuity of the reservoir beds. In carbonate reservoirs, natural fractures will be present in varying degrees and can impact fluid movement within the reservoir cycles.

Reservoir

Maps for each of the four reservoir units were generated using available openhole logs as well as integration of core data. All maps have been derived and documented in the previous sections, with referenced appendices. Porosity and permeability cutoffs are consistent with previous studies and reflect Corex's detailed reservoir evaluation within the T10-R28W1 area.

OIL IN PLACE, PRODUCTION HISTORY AND ESTIMATED RECOVERY

Original Oil in Place

The Corex internal estimation of original-oil-in-place ("OOIP") for the proposed Daly Unit No. 20 is 1,517 10^3m^3 (9,543 Mbbl) for the Lodgepole formation. Values of thickness, porosity and

water saturation of each LSD for the various reservoir zones are used to calculate the OOIP on an individual LSD basis. Details of the calculations are summarized in Table 1.

Historical Production

Figure 3 shows the production history of the wells within the proposed Daly Unit No. 20. There is a total of eighteen (18) wells which status can be broken down as follows: Eight (8) horizontal Lodgepole wells within the proposed unit boundary, One (1) horizontal Lodgepole well that is drilled along the northern unit boundary and nine (9) vertical wells (7 abandoned, 1 shut-in, 1 producing). Within the proposed unit there is currently no water disposal. All the referenced wells are perforated in the Lodgepole formation.

To the end of April 2019, the proposed Daly Unit No. 20 has produced cumulative volumes of oil of 105.7 10^3m^3 (665.1 Mbbl) and water of 486.6 10^3m^3 (3,061 Mbbl). The current recovery factor is 7.0%.

The first production began in October 1952. Further drilling of vertical wells resulted in an early peak production in August 1953. In April 2019, with the drilling and production of the last horizontal well the proposed Daly Unit No. 20 reached a peak of 69.7 m^3/d (438 b/d), or an average of 7 m^3/d (44 b/d) per well, with a 34% oil cut at the time, (Figure 3).

Primary Recovery

Table 3 lists the wells within the proposed unit area, together with the cumulative oil production to the end of April 2019 and the EUR estimated using decline analysis. The total EUR for the proposed Daly Unit No. 20 with further development is 226.9 10^3m^3 (1,427 Mbbl) for a recovery factor of 14.9% of the total OOIP of the Lodgepole section.

Secondary Recovery

Within the Lodgepole formation, the proposed waterflood will target the Middle and Lower Daly members which contain over 50% of the total OOIP. A section model of the Middle and Lower Daly zones was built to estimate the expected recovery from waterflooding. This section model used average reservoir properties and was tuned to match the type production profile of Corex horizontal producers within the Middle Daly member. With decline analysis and model results Corex expects an EURF of 19.6% under primary depletion. With horizontal wells converted into injectors, the section model yields an ultimate EURF of 32%, or an incremental recovery factor of 12.4%. Note, these recovery factors are based on the OOIP of the Middle and Lower Daly zones only and not the entire Lodgepole formation. Therefore, production not deemed to be within the Middle and Lower Daly has also not been included. Additional information on the section model that was scaled to represent Daly Unit No. 20 is included in Appendix XXII.

UNITIZATION

The basis for unitization is to implement a waterflood to increase the ultimate recovery of the OOIP from the proposed project area.

Unit Name

Corex proposes the name of the new unit shall be Daly Unit No. 20.

Unit Operator

Corex will be the Operator for Daly Unit No. 20.

Unitized Zones

The unitized zone to be waterflooded in the Daly Unit No. 20 will be the Lodgepole formation.

Unit Wells

There is a total of eighteen (18) wells which status can be broken down as follows: Nine (9) horizontal Lodgepole wells, (8 fully within the unit, and 1 partially within the unit) and nine (9) vertical wells (7 abandoned, 1 shut-in, 1 producing), all of the well in the proposed Daly Unit No. 20 are outlined in Table 2.

Unit Lands

Daly Unit No. 20 will consist of eight (8) Lsd's which will include Lsd's 11, and 14 of Section 3 and Lsd's 1, 2, 3, 6, 7 and 8 of Section 10, all in Township 10 Range 28W1. The lands included in the 40-acre tracts are outlined in Appendix XXIII.

Tract Factors

The proposed Daly Unit No. 20 will consist of eight (8) tracts based on remaining OOIP using maps created internally by Corex per Lsd, as of April 2019, with the production from the horizontal wells being divided according to the existing production allocation agreement. The calculation of the tract factors is outlined in Table 1.

Working Interest Owners

Appendix XXIII outlines the working interest for each recommended tract within the proposed Daly Unit No. 20. Corex will have a 100% WI across all tracts.

WATERFLOOD DEVELOPMENT

The objective of implementing a waterflood is to provide pressure support and improve recovery. The Lodgepole formation is relatively shallow with undersaturated oil having low solution gas-oil ratios and as such, there is not much drive energy within the system. Corex believes additional energy is required to improve the recovery. Waterflooding will enhance the recovery by providing pressure support as well as displacing the oil from the injectors towards the producers.

Rock and Fluid Properties

Rock and fluid properties for the Lodgepole formation are summarized in Table 4. These properties were estimated using standard correlations in the literature as well as existing oil analysis and PVT data.

Using Corex's internal database on fracture treatments and step rate tests, the fracture gradient for the Lodgepole formation is estimated to range between 19.0 kPa/m and 25.9 kPa/m, with an average of 23.3 kPa/m. The surface fracturing pressure is estimated to range between 6,348 kPa and 11,500 kPa with the average gradient the estimated surface fracturing pressure is 9,500 kPa.

Estimated Recovery

Using the results from the Daly section model, incremental reserves of 95.4 10^3m^3 (600.3 Mbbl) are expected. Based on the total OOIP for the Lodgepole formation, the incremental recovery factor is expected to be 6.29% for an overall recovery factor of 21.2%.

Economic Limit

The economic limit will be when the net oil rate and net oil price revenue stream becomes less than the current producing operating costs. Based on current price forecasts, the economic limit for the project would be 1 m^3/d.

Source of Injection Water

The wells in section 10-10-28W1 are flowlined to the 2-11-10-28 Daly Unit No. 3 battery, and the wells in section 3-10-28W1 battery are flowlined to the 12-4-10-28 Daly Unit No. 1 battery. Both of the adjacent units have been upgraded recently for waterflood (including FWKO, filter skids, pumps). We have ensured that we have either a spare flowline in the ROW, or one (1) of the two (2) well flowlines has been installed for high pressure with intent to be converted at a later date. For both of these units the source water is produced Lodgepole water, and surface piping will be modified as necessary to accommodate for the Daly Unit 20 wells.

The waterflood injection facilities consist of a free water knockout on the inlet stream, water tanks to filter out any large solids or emulsions from the produced water, two bag type filter banks to

further filter out any solids down to 1 micron, and a new injection pump. No new equipment will be required for this application area, with exception to the injection wellhead tie-ins and flowlines.

The injector wells will be equipped with surface injection flowrate and pressure monitoring with choke valves to control wellhead pressure and injection rates (Figure 7). The wells will be evaluated for installation of a downhole injection control device (ICD) system to ensure an even distribution of injection fluid across the horizontal wellbore (representation shown in Figure 5). These nozzles will also act as a choke to ensure the reservoir pressure remains below frac pressure. The water injection pipeline system will be monitored for leak detection using pressure variance and volume balancing. The corrosion control program outlining the planned system design and operational practices to prevent corrosion is located in Figure 7.

Operating Strategy

Corex's plan is to have alternating producer-injector patterns within the proposed Daly Unit No. 20 and the proposed injection scheme can be seen in Figure 4.

Injection rates are expected to be in the range of 50 m^3/d to 120 m^3/d, per well, subject to a maximum injection pressure of 8,500 kPa at the well head. This maximum pressure is based on a fracture pressure of 9,500 kPa and a safety factor of 90%. Initially, injection will target a monthly voidage replacement ratio (VRR) between 1.25 and 1.75. This over-injection will serve to replace the existing voidage within the proposed unit area. Once a cumulative VRR of one is attained, the injection rate will be scaled back to maintain the VRR at one, both monthly and a cumulative basis.

All producers will be kept at pump-off condition.

Pressure

The initial pressure is estimated to be between 7,800 kPa and 8,100 kPa. This is based on the depth of the Middle Daly zone and a static gradient ranging between 10.5 kPa/m and 10.8 kPa/m. To this date no pressure measurements have been taken within the proposed unit. Due to production to date the current pressure is below the initial reservoir pressure, it is projected that the pressure will continue decrease from primary depletion and the recent drilling of new producing wells. With low solution-gas oil, another drive mechanism will need to be implemented in order to improve the recovery within the proposed unit.

Waterflooding will help to re-pressurize and add energy to the reservoir. During the initial over-injection period, the reservoir pressure is expected to increase from the current level. Once the cumulative VRR reaches one, a monthly VRR of one will be maintained. At the stage of the first conversion the reservoir pressure is expected to be below its initial value. Prior to injection Corex will endeavor to record reservoir pressures within the proposed unit and continue upon implementing a secondary recovery scheme.

Waterflood Surveillance

Waterflood response within the proposed Daly Unit No. 20 will be closely monitored with the following:

- Regular production well testing to monitor fluid rate and water cut to watch for waterflood response
- Comparison of daily injection rates and pressure monitoring to targets
- Monitor monthly and cumulative voidage replacement ratio by pattern and overall unit
- Evaluation of Hall plots
- New injection targets will be sent to the field on a regular basis

Project Schedule

With the success of the recently drilled horizontal wells within application area, the proposed Daly Unit No. 20 is now fully developed. After a period of primary recovery Corex intends to convert several wells to injection in an alternating producer-injector waterflood scheme to support the other existing wells and implement a waterflood.

Conversion of the horizontal producers into injection wells is expected to start in Q3/Q4 2020. This schedule is contingent upon the approval of the Unitization and Waterflood application, as well as the various stake holders coming to agreement.

NOTIFICATIONS

In accordance with the regulations, Corex will deliver notification to all surface and mineral owners of the proposed EOR project of Daly Unit No. 20. Copies of the notices and proof of service to all affected owners will be forwarded to the Petroleum Branch, when available, to complete the Daly Unit No. 20 Application.

Should you have any comments and/or questions regarding this application, please contact Peter Parkinson at (403) 718-6371; peterp@corexresources.ca, or Chris Dunn, Engineering at (403) 718-6357; chrisd@corexresources.ca.

Regards,
COREX RESOURCES LTD.

David McGuinness
Executive Vice President, Land

Table 1 – Summary of Original Oil In Place and Tract Factor Calculations

Daly Unit No. 20
Lodgepole Unit

Tract LSD	Tract Weighting	Total	11-3 11-03-010-28W1	14-3 14-03-010-28W1	1-10 01-10-010-28W1	2-10 02-10-010-28W1
Tract Factor		100.000000000%	15.267014062%	14.352993121%	10.277085197%	10.246388566%
Flossie Lake						
Area (ac)		320	40	40	40	40
h (m)			5.7	6.4	2.7	5.1
Vb (ac-ft)		4,921	748	840	354	669
phi			11.5%	11.5%	11.5%	11.5%
Sw			20%	20%	20%	20%
HCPV			0.524	0.589	0.248	0.469
OOIP (Mbbls)		3,512	534	599	253	478
OOIP (Mstb)		3,283	499	560	236	446
OOIP (10^3m^3)		522	79	89	38	71
Middle Daly (Green)						
Area (ac)		320	40.0	40.0	40.0	40.0
h (m)			4.6	5.0	4.2	4.0
Vb (ac-ft)		4,357	604	656	551	525
phi			10.3%	10.3%	10.3%	10.3%
Sw			30%	30%	30%	30%
HCPV		2	0.332	0.361	0.303	0.288
OOIP (Mbbls)		2,437	338	367	308	294
OOIP (Mstb)		2,278	316	343	288	274
OOIP (10^3m^3)		362	50	55	46	44
Lower Daly (Purple)						
Area (ac)		320	40.0	40.0	40.0	40.0
h (m)			4.9	3.5	4.1	3.0
Vb (ac-ft)		4,974	643	459	538	394
phi			9.5%	9.5%	9.5%	9.5%
Sw			25%	25%	25%	25%
HCPV		3	0.349	0.249	0.292	0.214
OOIP (Mbbls)		2,749	355	254	297	218
OOIP (Mstb)		2,569	332	237	278	203
OOIP (10^3m^3)		409	53	38	44	32
Crinoid						
Area (ac)		320	40.0	40.0	40.0	40.0
h (m)			3.3	2.9	3.3	1.4
Vb (ac-ft)		2,795	433	381	433	184
phi			9.3%	9.3%	9.3%	9.3%
Sw			25%	25%	25%	25%
HCPV		1	0.230	0.202	0.230	0.098
OOIP (Mbbls)		1,513	234	206	234	99
OOIP (Mstb)		1,414	219	192	219	93
OOIP (10^3m^3)		225	35	31	35	15
Total Lodgepole						
Total OOIP (Mstb)		**9,543**	**1,366**	**1,333**	**1,021**	**1,017**
Total OOIP (10^3m^3)		1,517	217	212	162	162
Cumulative Oil (Mstb)		**665**	**10.3**	**58.7**	**109.0**	**107.5**
OOIP-Cum Prd (Mstb	**100%**	**8,878**	**1,355**	**1,274**	**912**	**910**

Comments: **Cumulative production to April 2019**
Bo **1.07**

Well 1			100/11-03-010-28W1/00	100/14-03-010-28W1/00	100/01-10-010-28W1/00	100/02-10-010-28W1/00
Factor			100%	100%	100%	100%
Cumulative Oil (Mstb)			6.3	54.4	61.1	57.1
Well 2			102/11-03-010-28W1/00	102/11-03-010-28W1/00	102/03-10-010-28W1/00	102/03-10-010-28W1/00
Factor			48.25%	51.75%	33.16%	34.93%
Cumulative Oil (Mstb)			4.0	4.0	86.0	86.0
Well 3			103/11-03-010-28W1/00	103/11-03-010-28W1/00	103/03-10-010-28W1/00	103/03-10-010-28W1/00
Factor			48.81%	51.19%	33.28%	35.15%
Cumulative Oil (Mstb)			4.4	4.4	8.4	8.4
Well 4					104/03-10-010-28W1/00	104/03-10-010-28W1/00
Factor					33.44%	34.87%
Cumulative Oil (Mstb)					49.8	49.8

Table 1 – Summary of Original Oil In Place and Tract Factor Calculations (Continued)

Daly Unit No. 20
Lodgepole Unit

Tract LSD	Tract Weighting	Total	3-10 03-10-010-28W1	6-10 06-10-010-28W1	7-10 07-10-010-28W1	8-10 08-10-010-28W1
Tract Factor		100.000000000%	13.315178289%	15.144631871%	11.838913978%	9.557794916%
Flossie Lake						
Area (ac)		320	40	40	40	40
h (m)			5.7	4.6	4.9	2.4
Vb (ac-ft)		4,921	748	604	643	315
phi			11.5%	11.5%	11.5%	11.5%
Sw			20%	20%	20%	20%
HCPV			0.524	0.423	0.451	0.221
OOIP (Mbbls)		3,512	534	431	459	225
OOIP (Mstb)		3,283	499	403	429	210
OOIP (10^3m^3)		522	79	64	68	33
Middle Daly (Green)						
Area (ac)		320	40.0	40.0	40.0	40.0
h (m)			3.9	4.3	2.9	4.3
Vb (ac-ft)		4,357	512	564	381	564
phi			10.3%	10.3%	10.3%	10.3%
Sw			30%	30%	30%	30%
HCPV		2	0.281	0.310	0.209	0.310
OOIP (Mbbls)		2,437	286	316	213	316
OOIP (Mstb)		2,278	268	295	199	295
OOIP (10^3m^3)		362	43	47	32	47
Lower Daly (Purple)						
Area (ac)		320	40.0	40.0	40.0	40.0
h (m)			4.2	7.4	6.5	4.3
Vb (ac-ft)		4,974	551	971	853	564
phi			9.5%	9.5%	9.5%	9.5%
Sw			25%	25%	25%	25%
HCPV		3	0.299	0.527	0.463	0.306
OOIP (Mbbls)		2,749	305	537	472	312
OOIP (Mstb)		2,569	285	502	441	292
OOIP (10^3m^3)		409	45	80	70	46
Crinoid						
Area (ac)		320	40.0	40.0	40.0	40.0
h (m)			2.9	4.4	0.9	2.2
Vb (ac-ft)		2,795	381	577	118	289
phi			9.3%	9.3%	9.3%	9.3%
Sw			25%	25%	25%	25%
HCPV		1	0.202	0.307	0.063	0.153
OOIP (Mbbls)		1,513	206	312	64	156
OOIP (Mstb)		1,414	192	292	60	146
OOIP (10^3m^3)		225	31	46	9	23
Total Lodgepole						
Total OOIP (Mstb)		**9,543**	**1,244**	**1,491**	**1,128**	**943**
Total OOIP (10^3m^3)		1,517	198	237	179	150
Cumulative Oil (Mstb)		**665**	**61.6**	**146.8**	**77.2**	**94.0**
OOIP-Cum Prd (Mstb)	**100%**	**8,878**	**1,182**	**1,345**	**1,051**	**849**

Well 1			100/03-10-010-28W1/00	100/06-10-010-28W1/00	100/07-10-010-28W1/00	100/08-10-010-28W1/00
Factor			100%	100%	100%	100%
Cumulative Oil (Mstb)			15.7	119.6	47.2	68.5
Well 2			102/03-10-010-28W1/00		100/07-10-010-28W1/02	
Factor			31.91%		100%	
Cumulative Oil (Mstb)			86.0		0.5	
Well 3			103/03-10-010-28W1/00	104/12-10-010-28W1/00	104/12-10-010-28W1/00	104/12-10-010-28W1/00
Factor			31.57%	10.96%	10.86%	9.55%
Cumulative Oil (Mstb)			8.4	2.4	2.4	2.4
Well 4			104/03-10-010-28W1/00	102/06-10-010-28W1/00	102/06-10-010-28W1/00	102/06-10-010-28W1/00
Factor			31.69%	33.28%	36.08%	30.64%
Cumulative Oil (Mstb)			49.8	64.7	64.7	64.7
Well 5				103/06-10-010-28W1/00	103/06-10-010-28W1/00	103/06-10-010-28W1/00
Factor				32.40%	35.83%	31.77%
Cumulative Oil (Mstb)				10.2	10.2	10.2
Well 6				104/06-10-010-28W1/00	104/06-10-010-28W1/00	104/06-10-010-28W1/00
Factor				32.04%	33.78%	34.17%
Cumulative Oil (Mstb)				6.5	6.5	6.5

Table 2 – Well List – Status

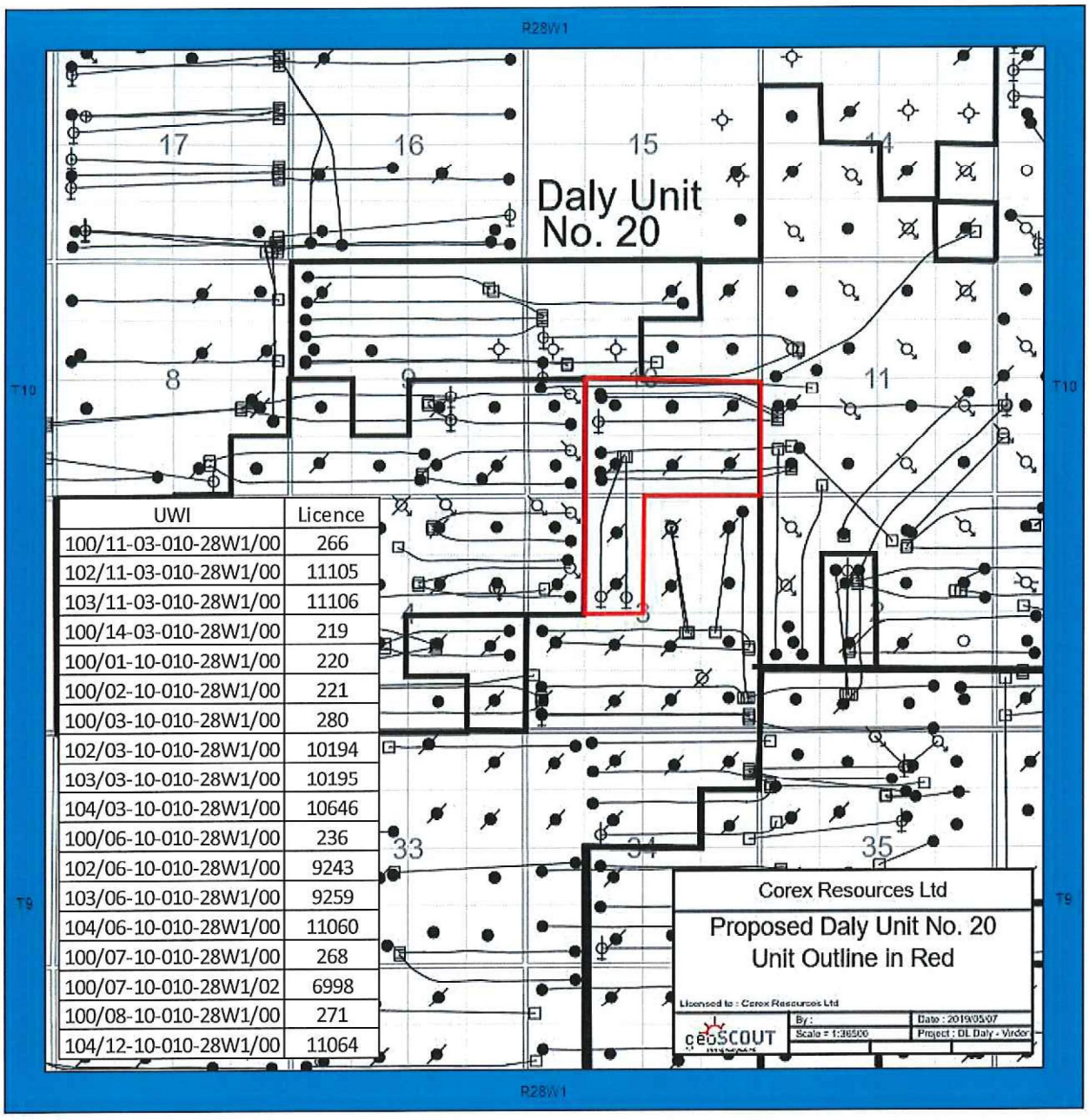
UWI Well ID	Prod./Inject. Formation	First Prod. YYYY/MM	Last Prod. YYYY/MM	Type
100/11-03-010-28W1/00	Mlodgepl	1953-06-01	1982-08-31	Vertical
102/11-03-010-28W1/00	Mlodgepl			Horizontal
103/11-03-010-28W1/00	Mlodgepl			Horizontal
100/14-03-010-28W1/00	Mlodgepl	1952-10-01	1966-04-30	Vertical
100/01-10-010-28W1/00	Mlodgepl	1952-11-01	1971-10-31	Vertical
100/02-10-010-28W1/00	Mlodgepl	1952-11-01	1965-12-31	Vertical
100/03-10-010-28W1/00	Mlodgepl	1953-08-01	1957-10-31	Vertical
102/03-10-010-28W1/00	Mlodgepl	2015-01-01	2019-02-28	Horizontal
103/03-10-010-28W1/00	Mlodgepl	2015-01-01	2017-07-31	Horizontal
104/03-10-010-28W1/00	Mlodgepl	2017-07-01	2019-02-28	Horizontal
100/06-10-010-28W1/00	Mlodgepl	1953-01-01	2019-02-28	Vertical
102/06-10-010-28W1/00	Mlodgepl	2013-03-01	2019-02-28	Horizontal
103/06-10-010-28W1/00	Mlodgepl	2013-03-01	2015-08-31	Horizontal
104/06-10-010-28W1/00	Mlodgepl			Horizontal
100/07-10-010-28W1/00	Mlodgepl	1953-06-01	1963-07-31	Vertical
100/07-10-010-28W1/02	Mlodgepl	2009-08-01	2013-02-28	Vertical
100/08-10-010-28W1/00	Mlodgepl	1953-07-01	1963-07-31	Vertical
104/12-10-010-28W1/00	Mlodgepl			Horizontal

Table 3 – Cumulative Oil Production and Estimated Ultimate Recovery

UWI Well ID	Type	Cumulative	Estimated
100/11-03-010-28W1/00	Vertical	6.26	6.26
102/11-03-010-28W1/00	Horizontal	3.97	130
103/11-03-010-28W1/00	Horizontal	4.35	130
100/14-03-010-28W1/00	Vertical	54.43	54.43
100/01-10-010-28W1/00	Vertical	61.06	61.06
100/02-10-010-28W1/00	Vertical	57.09	57.09
100/03-10-010-28W1/00	Vertical	15.69	15.69
102/03-10-010-28W1/00	Horizontal	85.99	199.52
103/03-10-010-28W1/00	Horizontal	8.39	8.39
104/03-10-010-28W1/00	Horizontal	49.84	186.45
100/06-10-010-28W1/00	Vertical	119.59	145.49
102/06-10-010-28W1/00	Horizontal	64.74	151.70
103/06-10-010-28W1/00	Horizontal	10.24	10.24
104/06-10-010-28W1/00	Horizontal	6.46	130.90
100/07-10-010-28W1/00	Vertical	47.20	47.20
100/07-10-010-28W1/02	Vertical	0.52	0.52
100/08-10-010-28W1/00	Vertical	68.52	68.52
104/12-10-010-28W1/00	Horizontal	2.39	75.63

Table 4 – Summary of Rock and Fluid Properties

Proposed Daly Unit No. 20		
Rock and Fluid Properties Lodgepole Formation		
Formation Pressure	kPa	7,800
Oil Gravity	°API	35
Solution Gas-Oil Ratio	m^3/m^3	15
Oil Formation Volume Factor	Rm^3/Sm^3	1.07
Average Porosity	fraction	0.1
Average Air Permeability	mD	1.2



UWI	Licence
100/11-03-010-28W1/00	266
102/11-03-010-28W1/00	11105
103/11-03-010-28W1/00	11106
100/14-03-010-28W1/00	219
100/01-10-010-28W1/00	220
100/02-10-010-28W1/00	221
100/03-10-010-28W1/00	280
102/03-10-010-28W1/00	10194
103/03-10-010-28W1/00	10195
104/03-10-010-28W1/00	10646
100/06-10-010-28W1/00	236
102/06-10-010-28W1/00	9243
103/06-10-010-28W1/00	9259
104/06-10-010-28W1/00	11060
100/07-10-010-28W1/00	268
100/07-10-010-28W1/02	6998
100/08-10-010-28W1/00	271
104/12-10-010-28W1/00	11064

Figure 1 – Location of Proposed Daly Unit No. 20, Red Outline

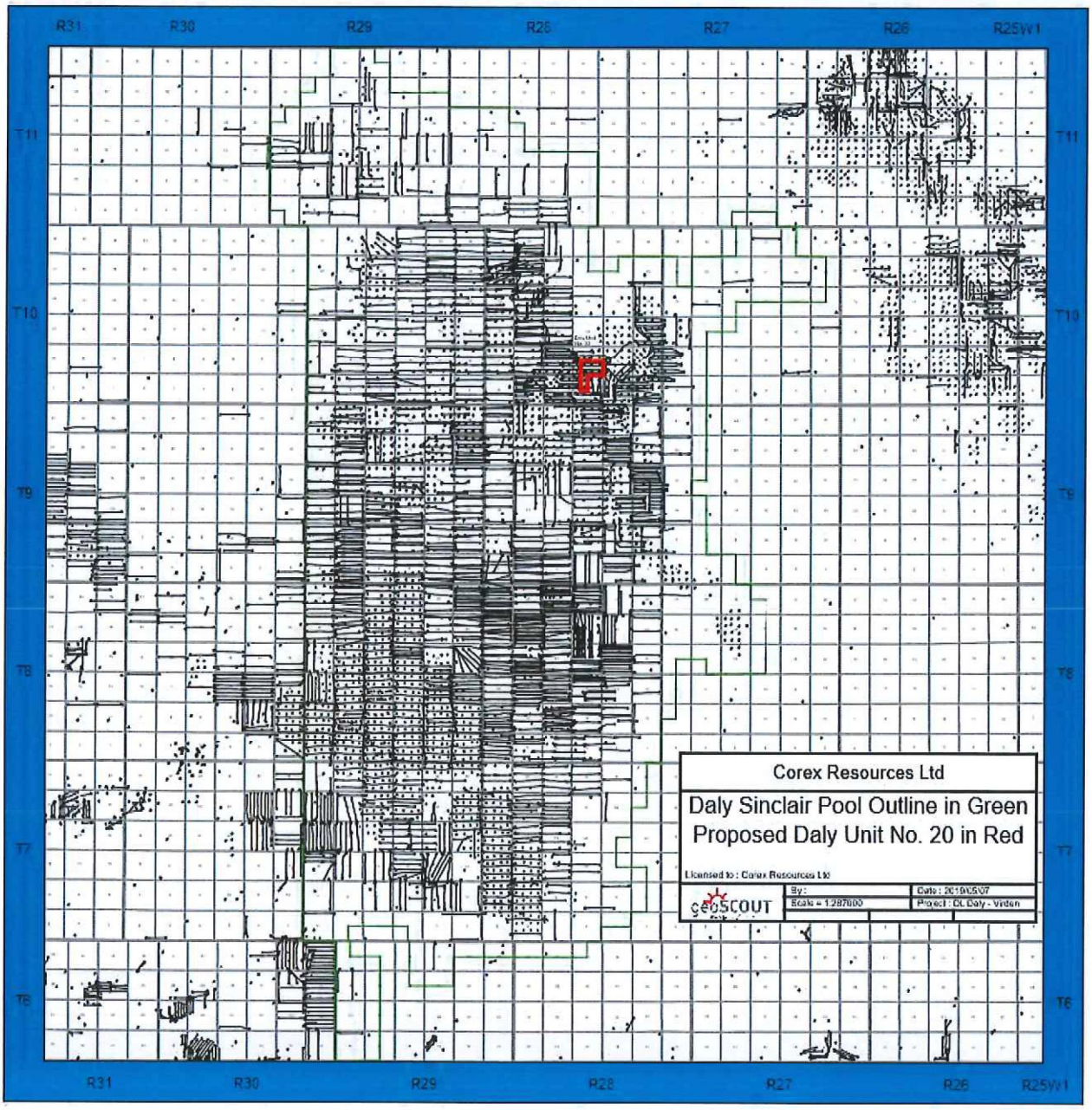


Figure 2 – Location of Proposed Daly Unit No. 20 within the Daly Sinclair Field, Green Outline

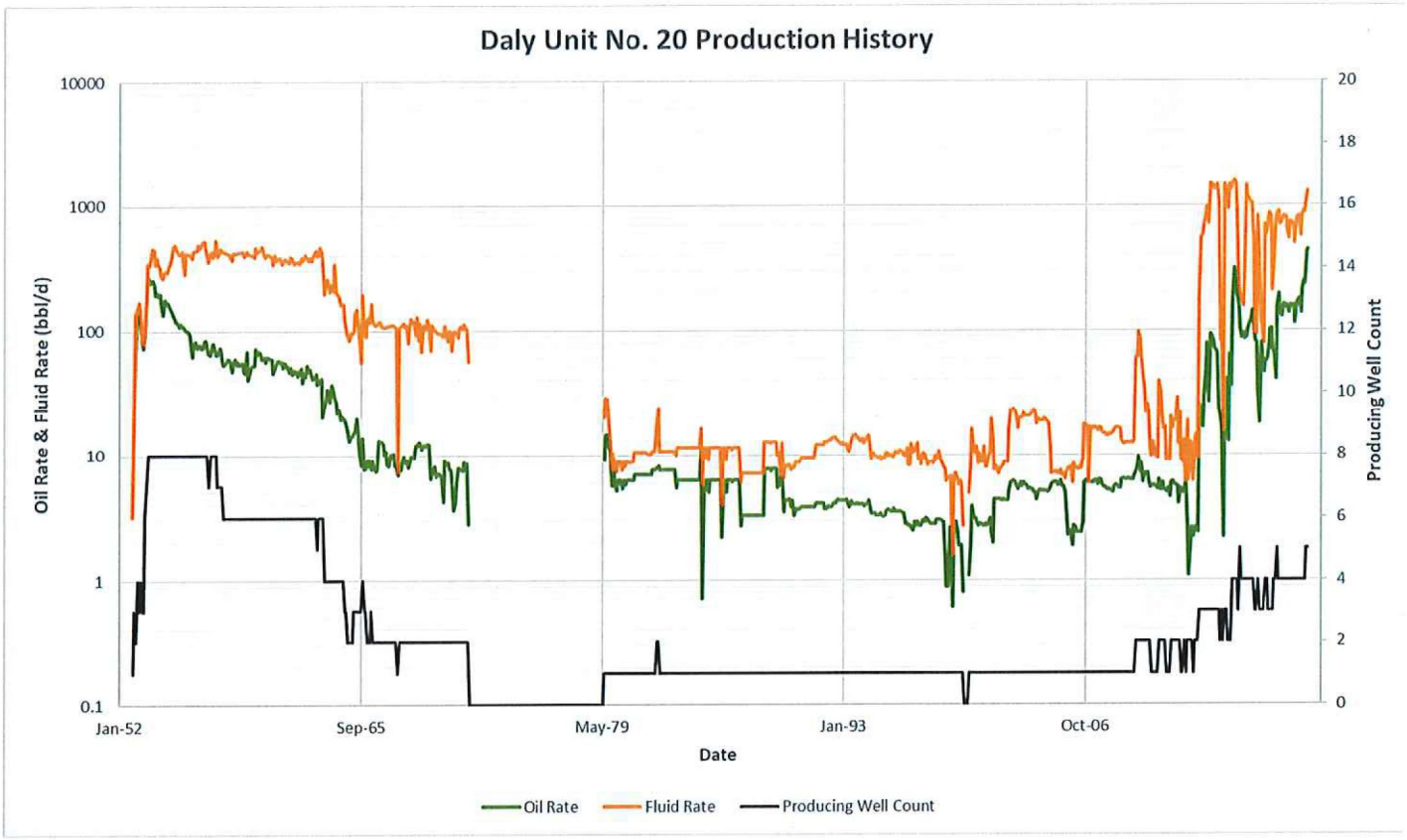


Figure 3 – Production History of Wells within Proposed Daly Unit No. 20

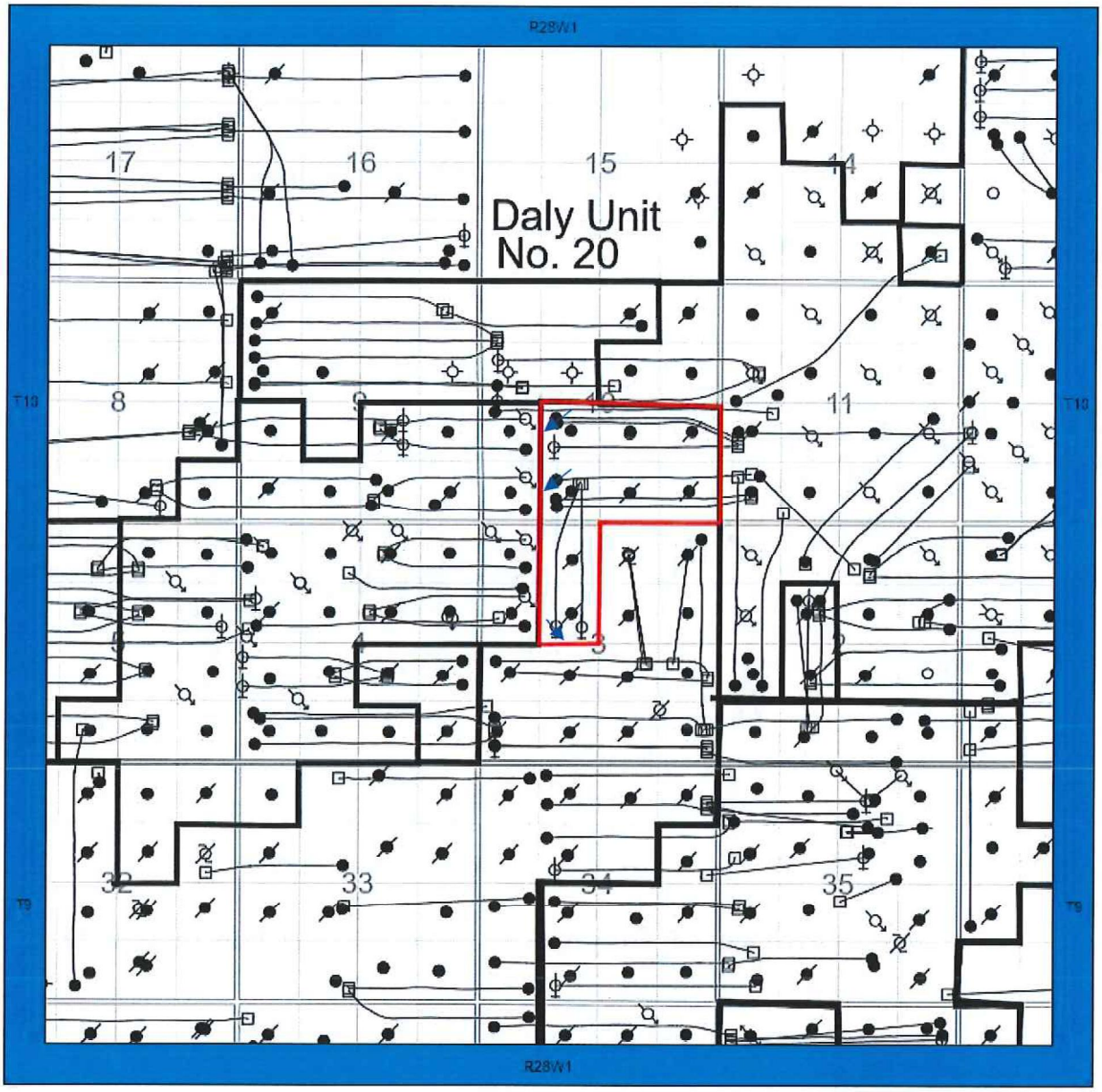


Figure 4 – Proposed Injector Locations

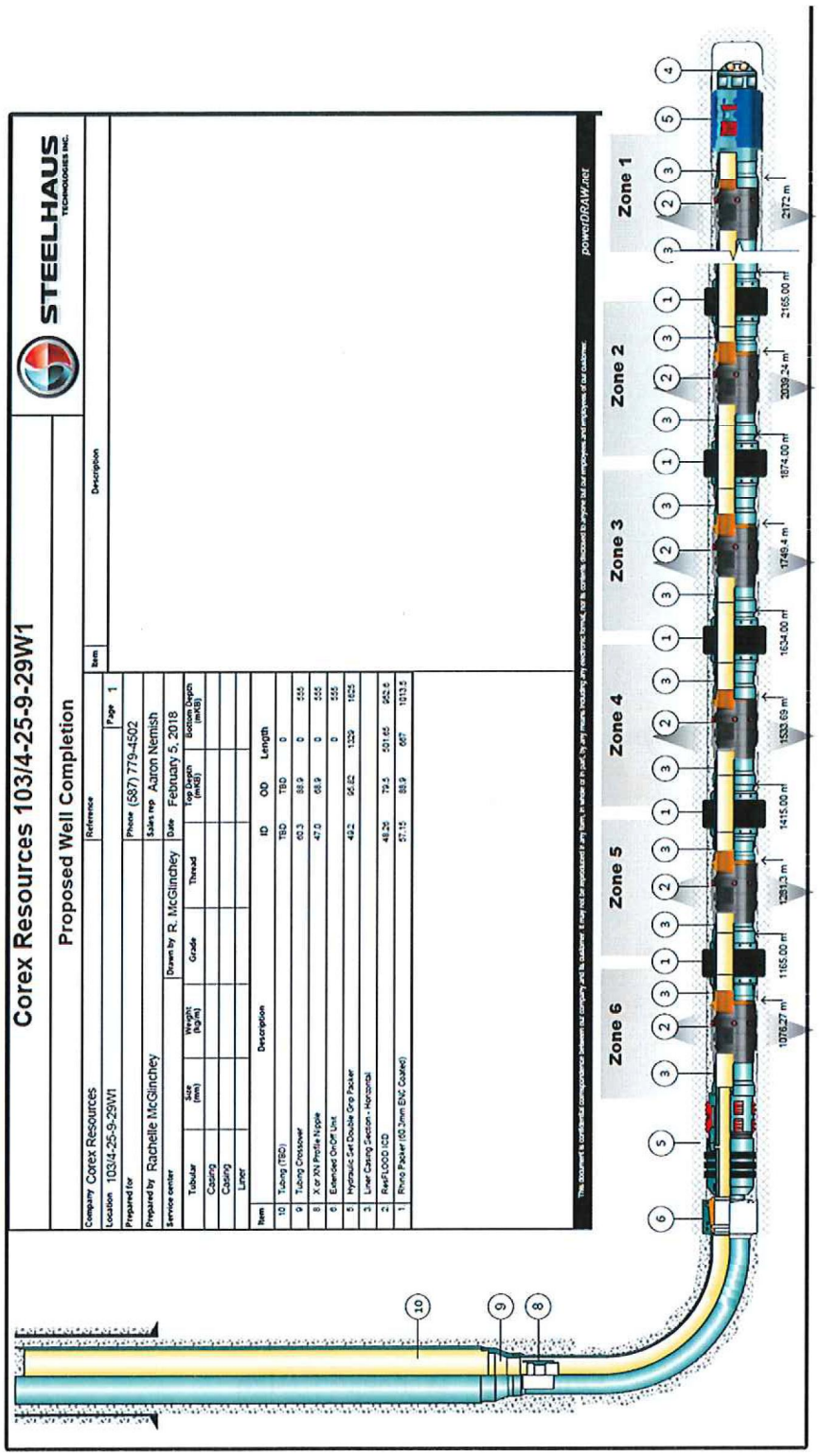


Figure 5 – Wellbore Schematic for Injector Nozzle System

All tubing will be either plastic lined (polycore) or metallic coated for corrosion, with an ID of 60.3mm

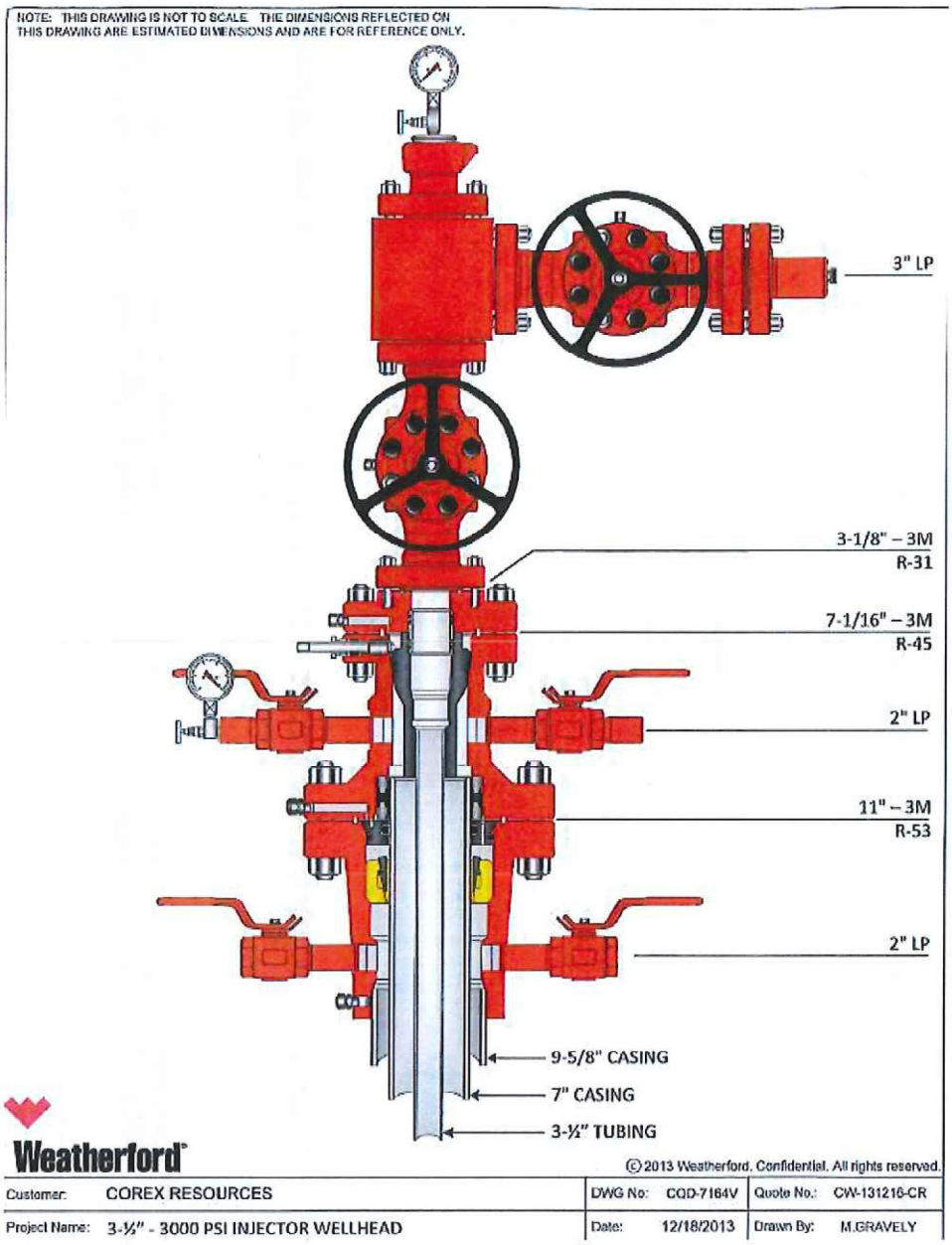
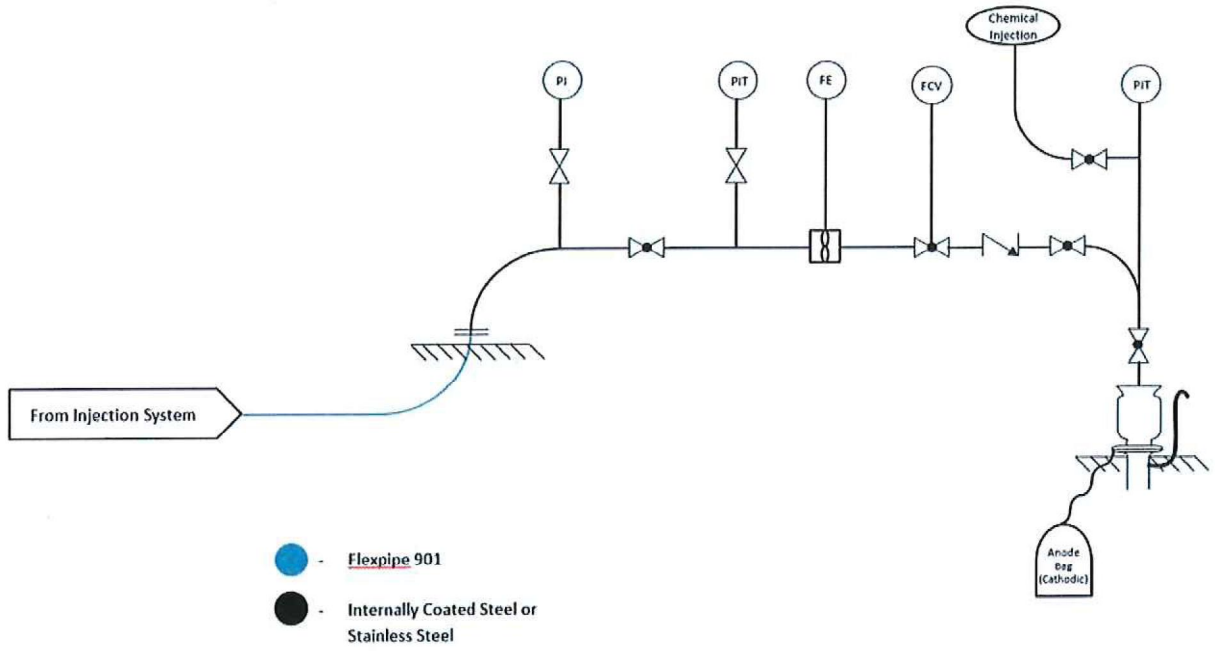


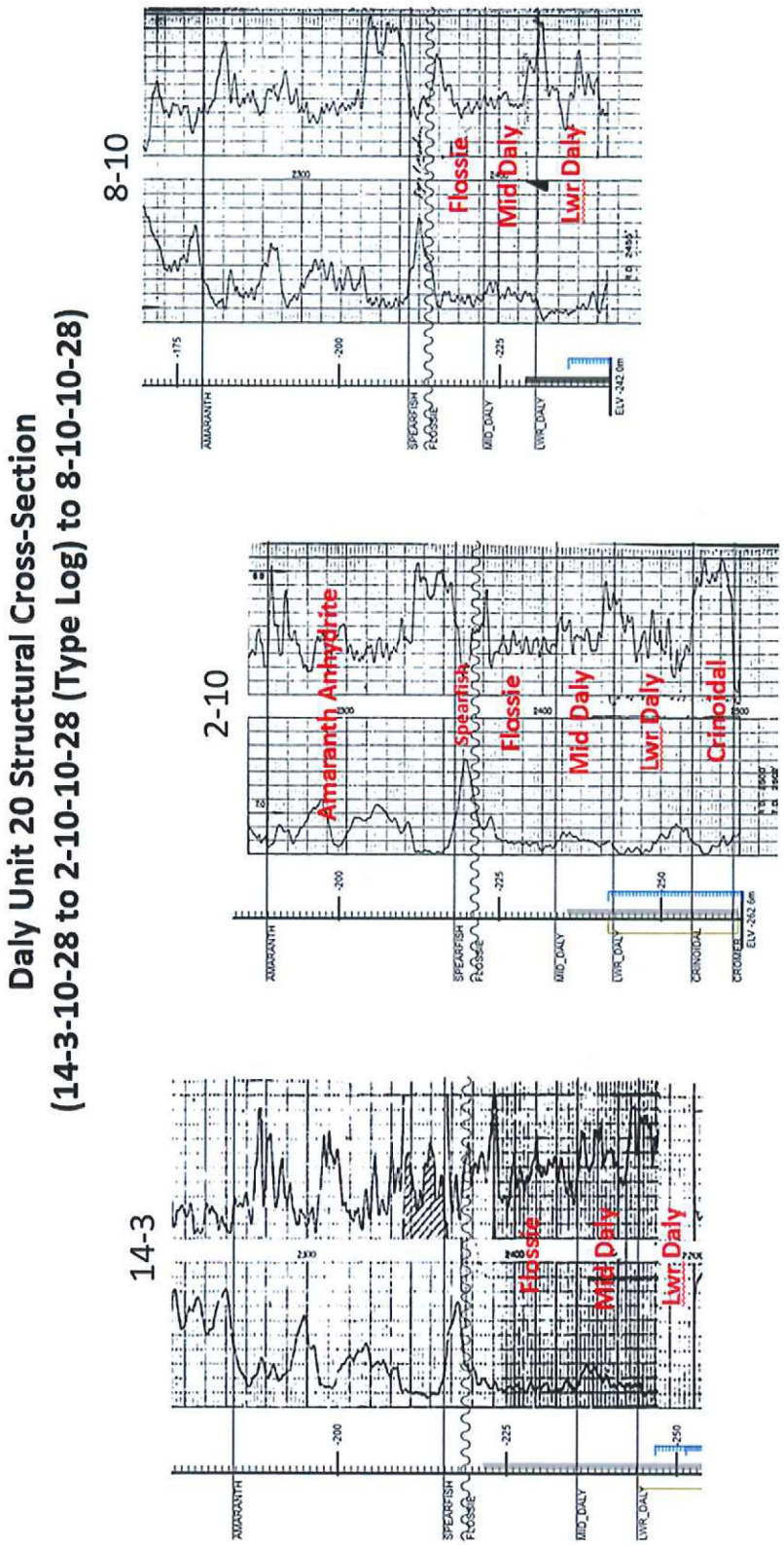
Figure 6 – Wellhead Design



All injection pipelines will have corrosion inhibitor injected at the 12-04 & 2-11 facilities, which will carry through to the wellhead for downhole corrosion control (wellhead injection points will be available as needed). Scale inhibitor will be injected in as well at the wellhead through continuous pumps as necessary. Both of these chemicals are also injected upstream at the producing source wells to protect the pipelines and the injection facilities at the battery. Wellbore casing will have cathodic protection installed for corrosion control. The PIT and FE on the diagram will be setup through a monitoring system in addition to one at the injection plant to monitor pipelines for any leaks through pressure and flow balance. Alarm points will be setup with callouts.

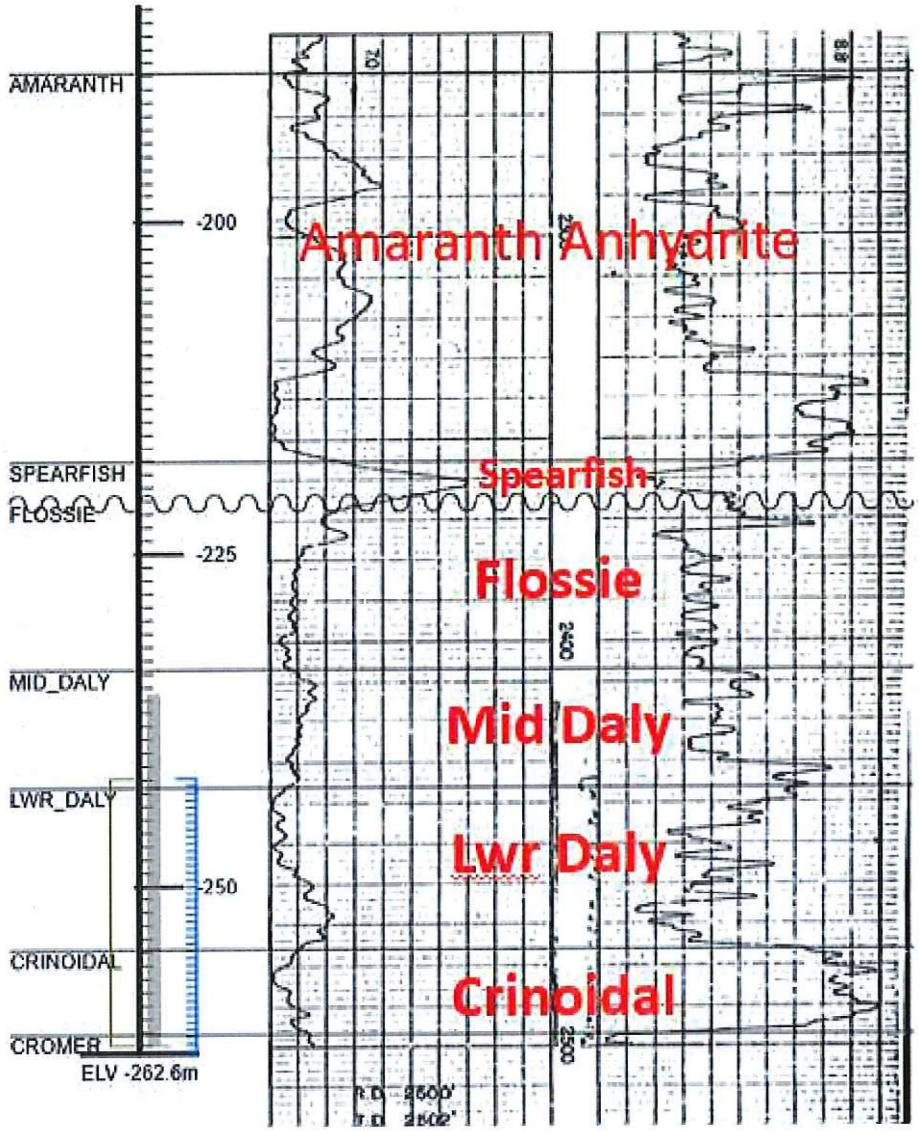
Figure 7 – Corrosion Control System & Monitoring

Appendix I – Cross Section

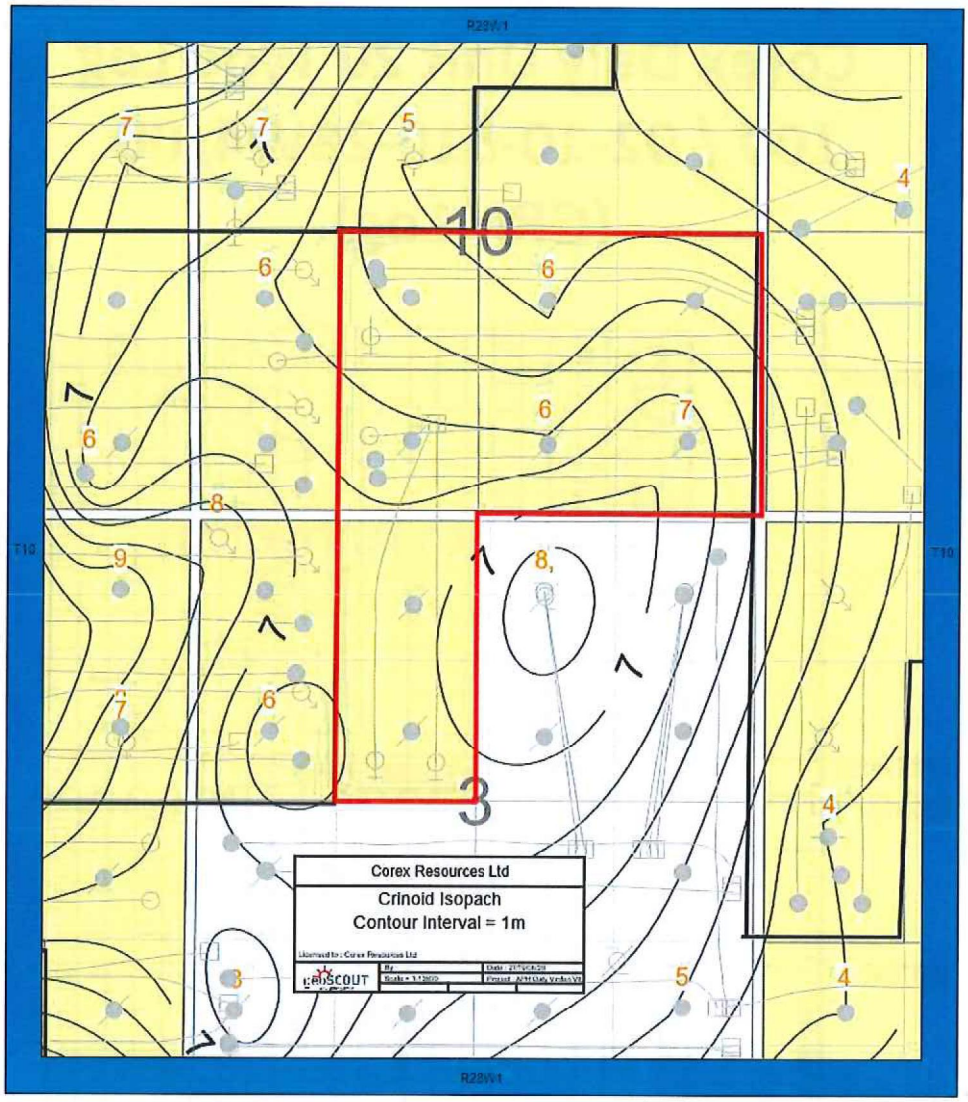


Stratigraphy of the Lodgepole Formation: Type Log

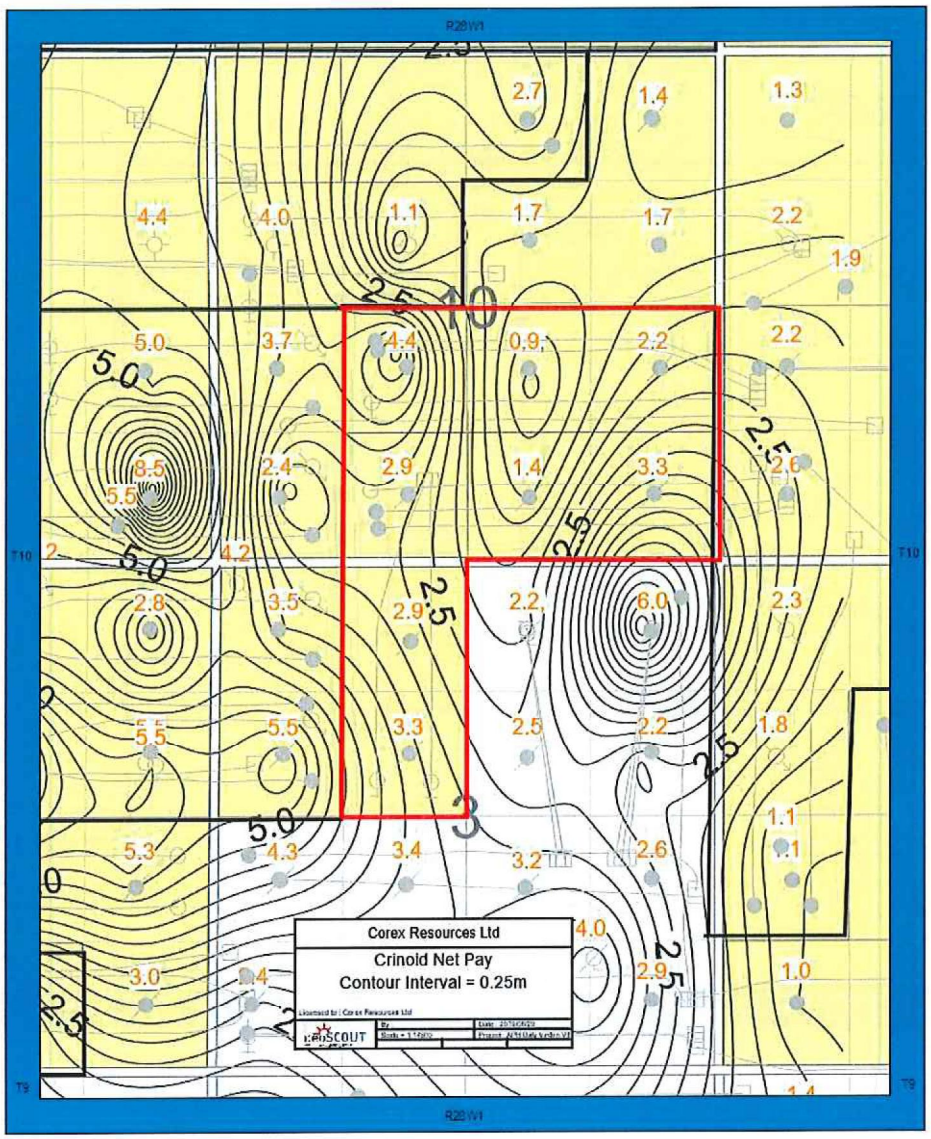
Corex Daly Unit 20 Type Log
100 / 02-10-010-28W4/00
(GRN Log)



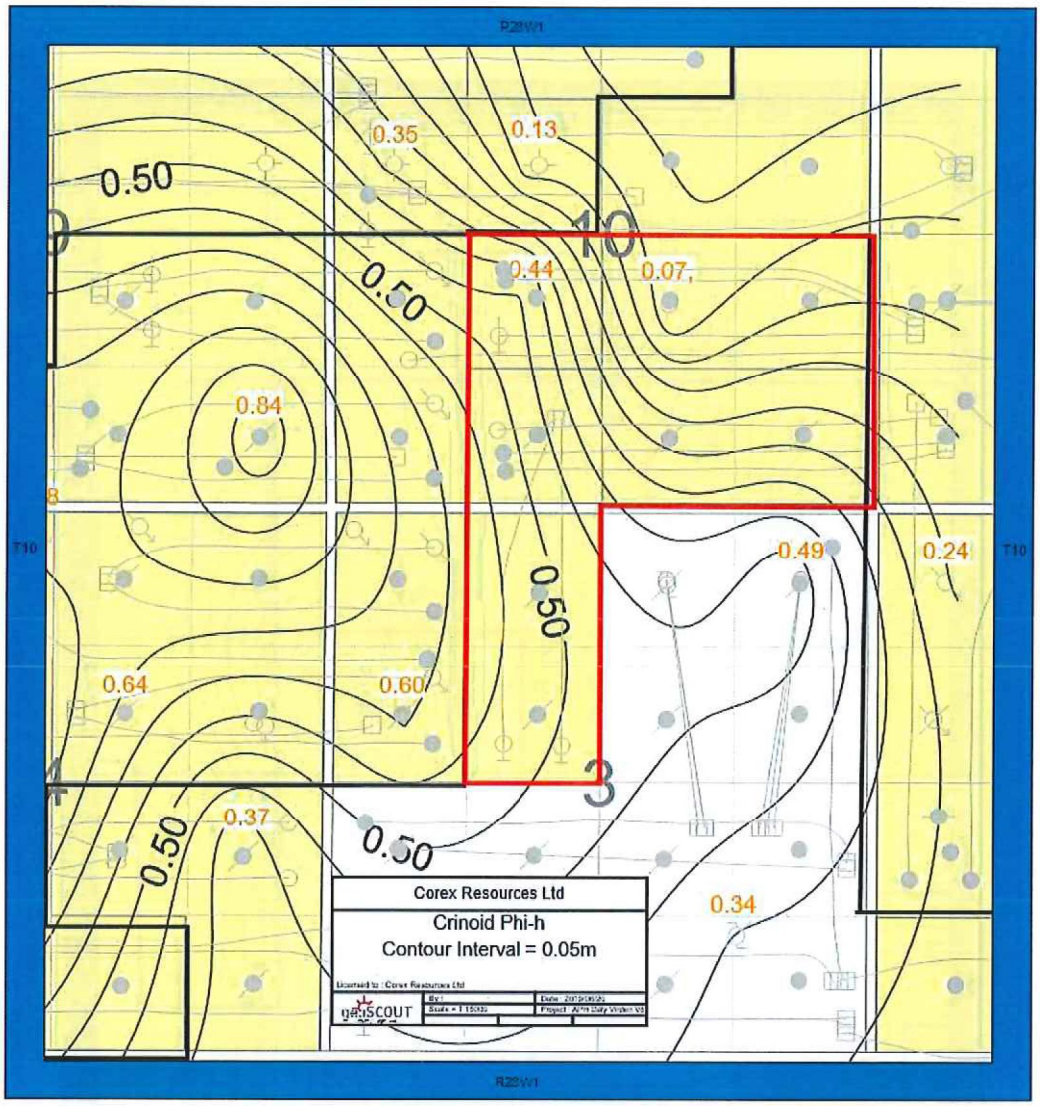
Appendix II – Crinoidal– Isopach



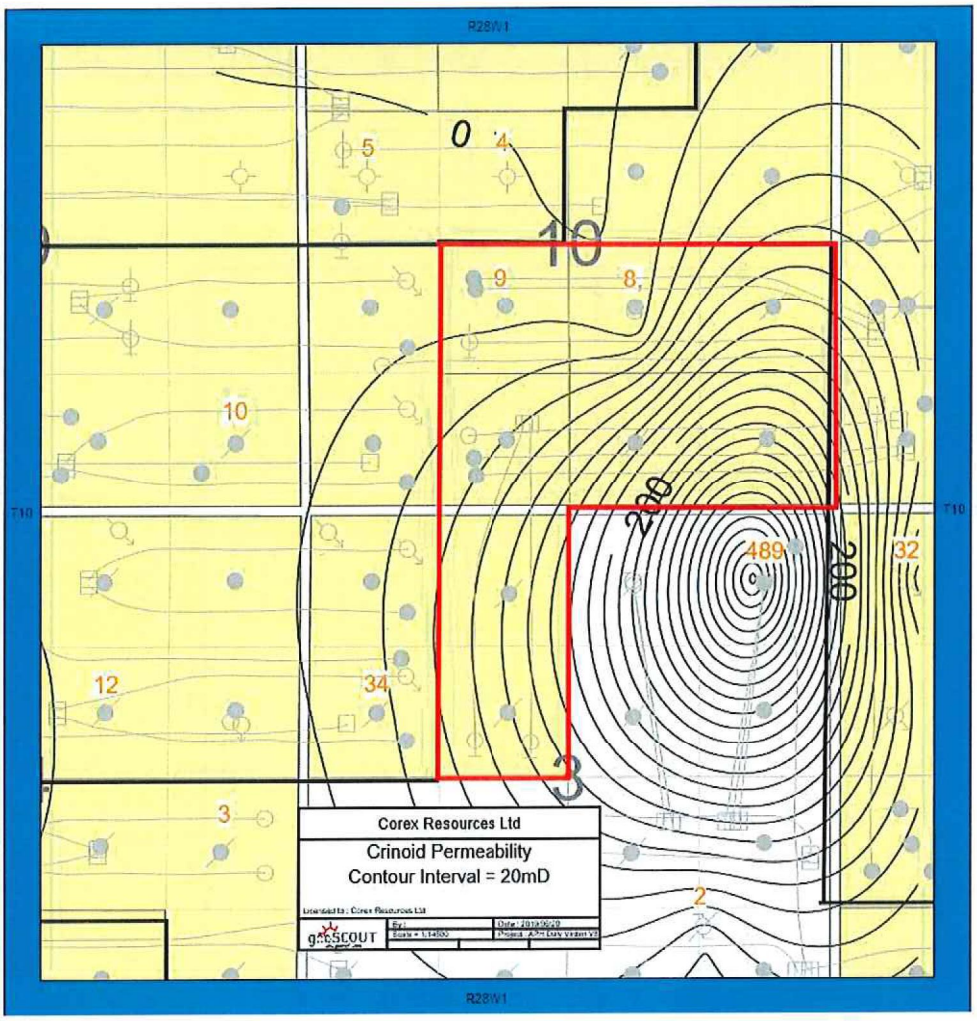
Appendix III – Crinoidal– Net Pay



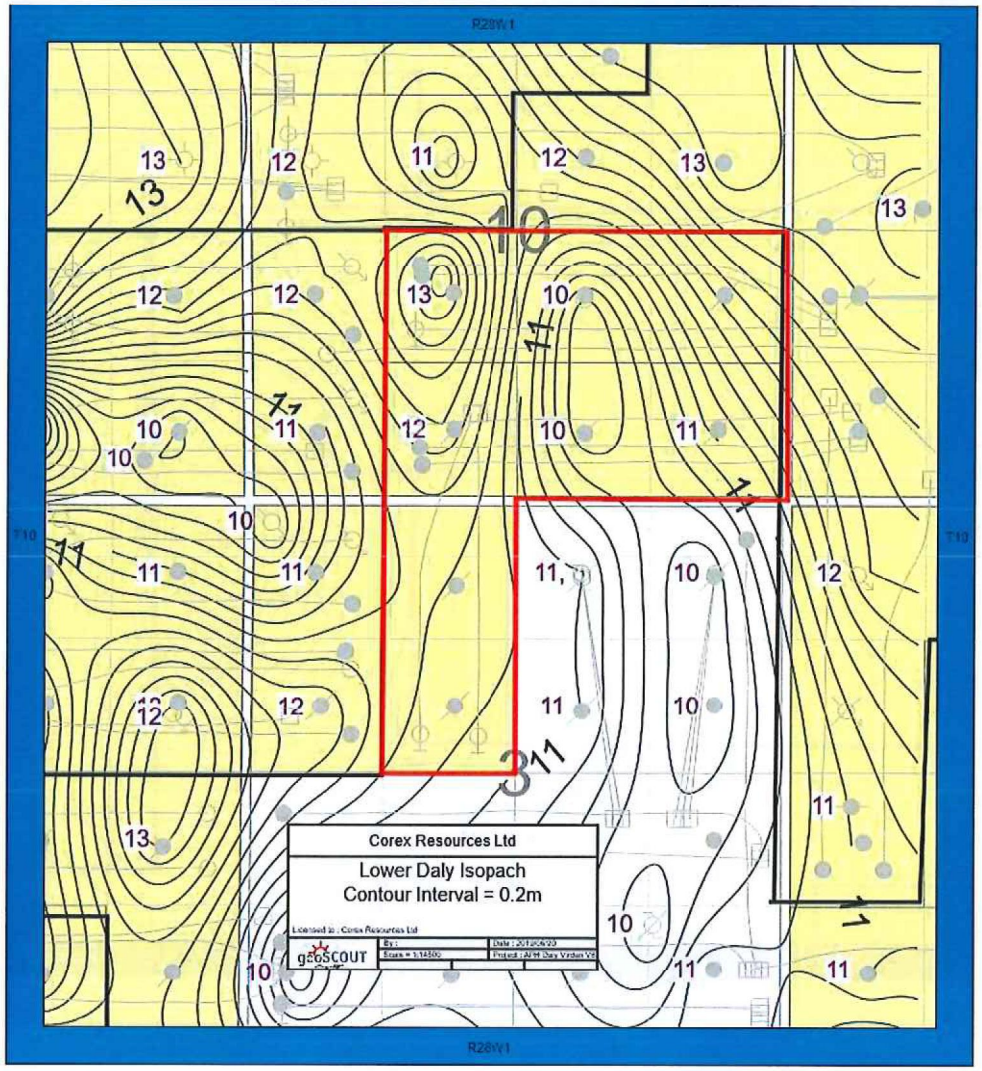
Appendix IV – Crinoidal – Porosity-Thickness



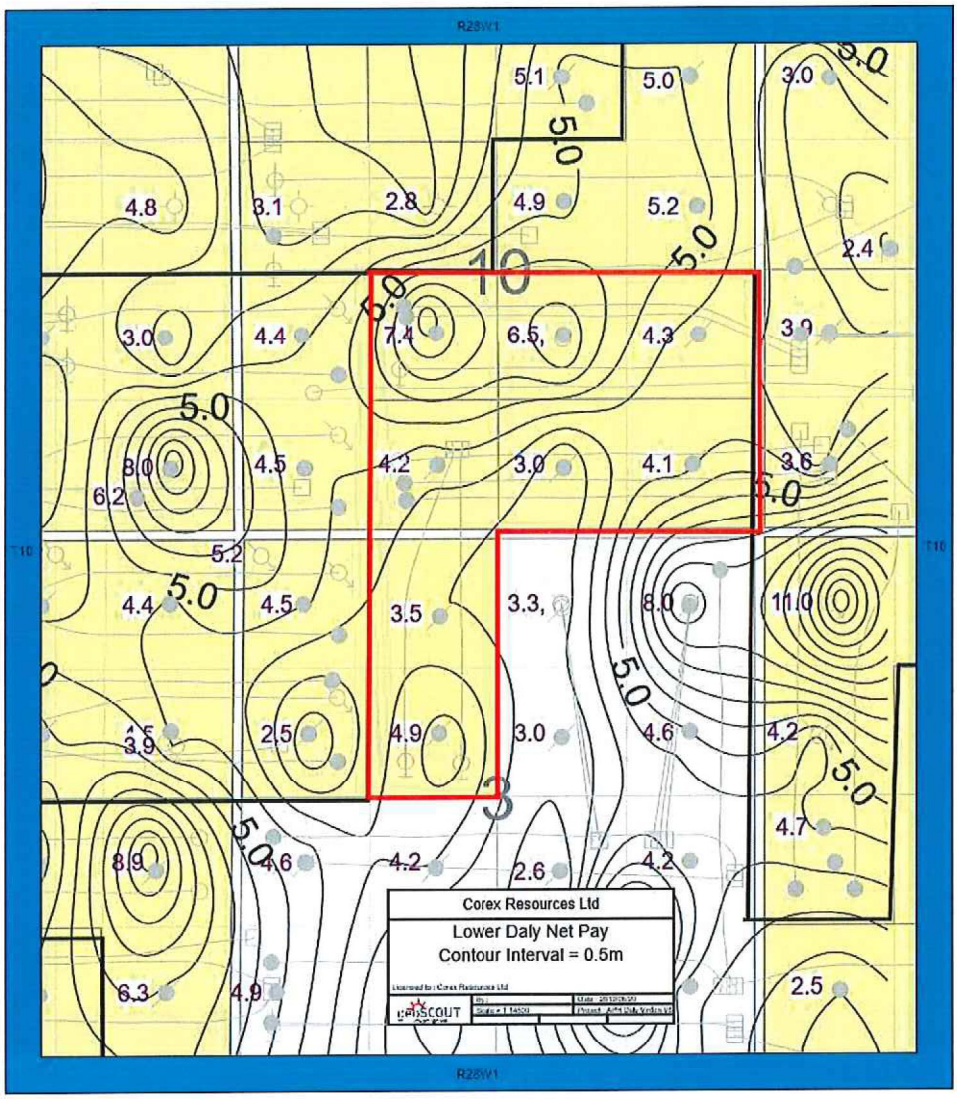
Appendix V – Crinoidal – Permeability



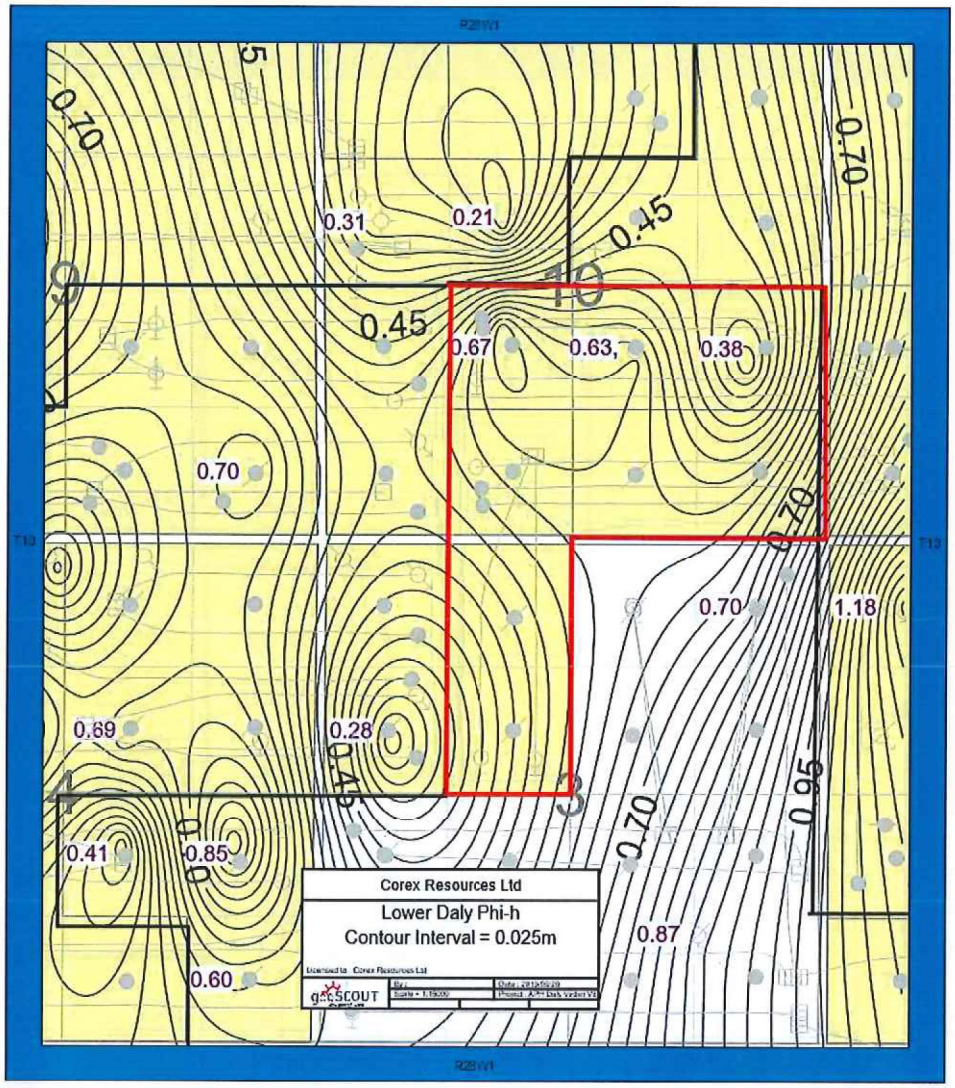
Appendix VI – Lower Daly – Isopach



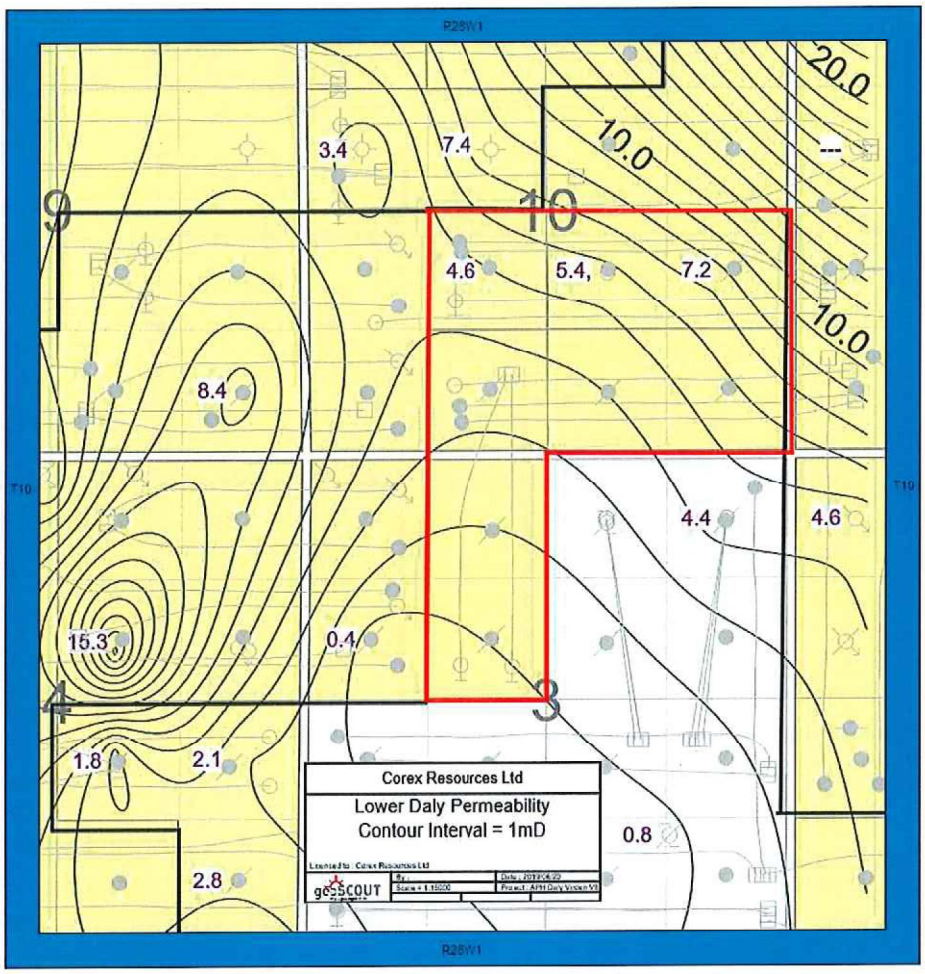
Appendix VII – Lower Daly – Net Pay



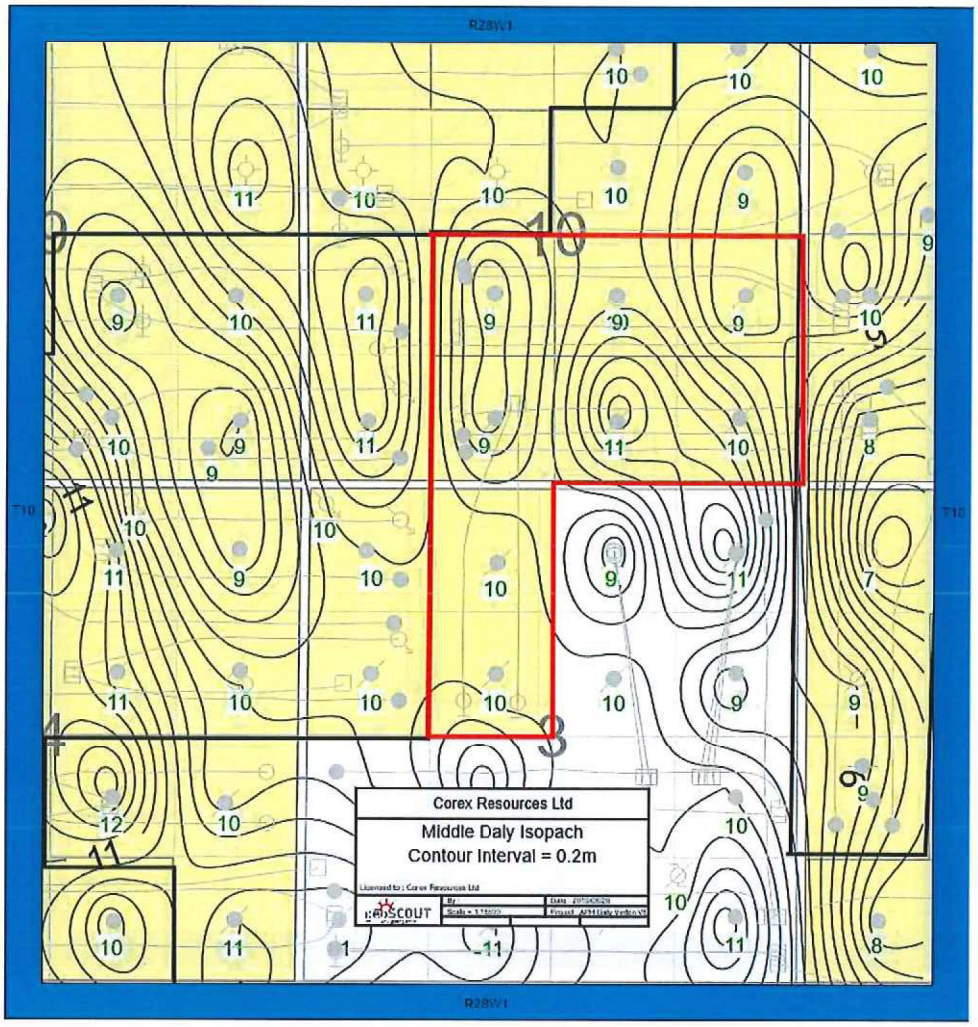
Appendix VIII – Lower Daly – Porosity-Thickness



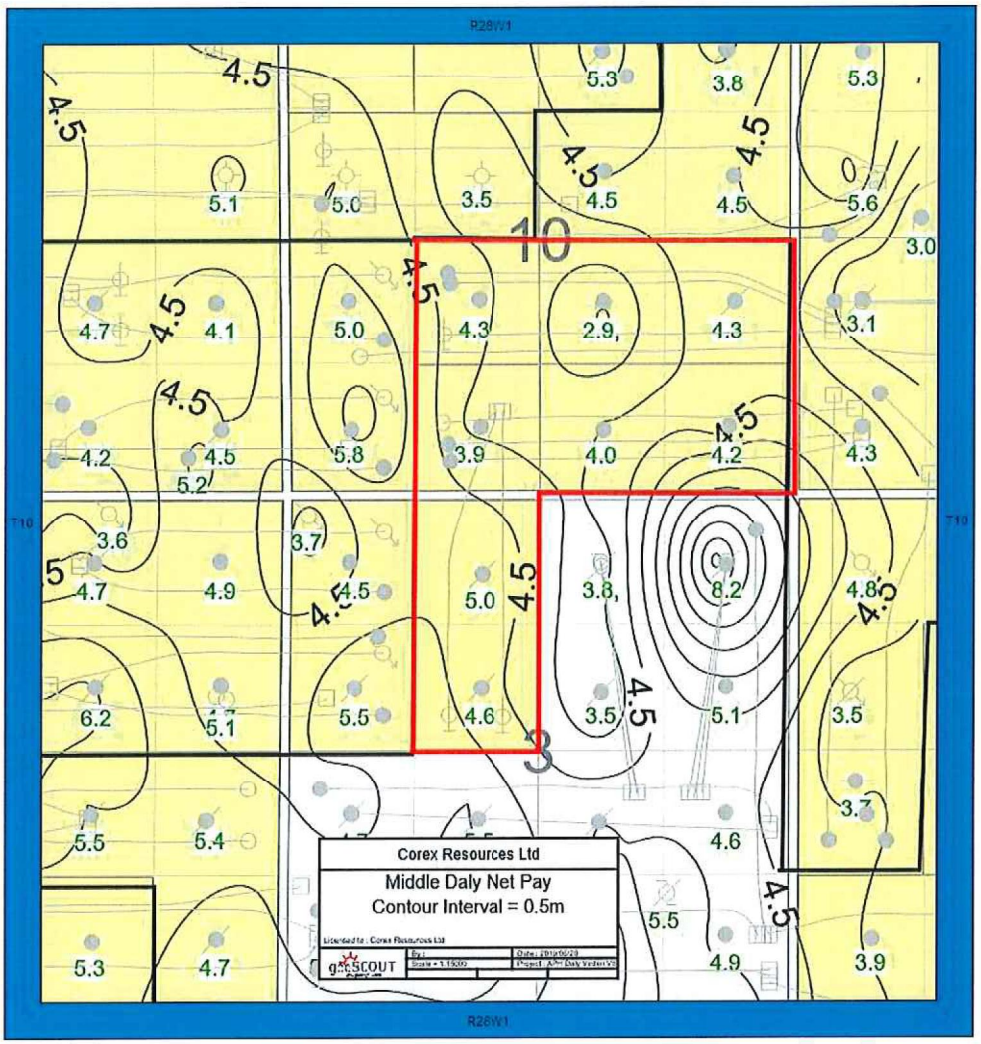
Appendix IX – Lower Daly – Permeability



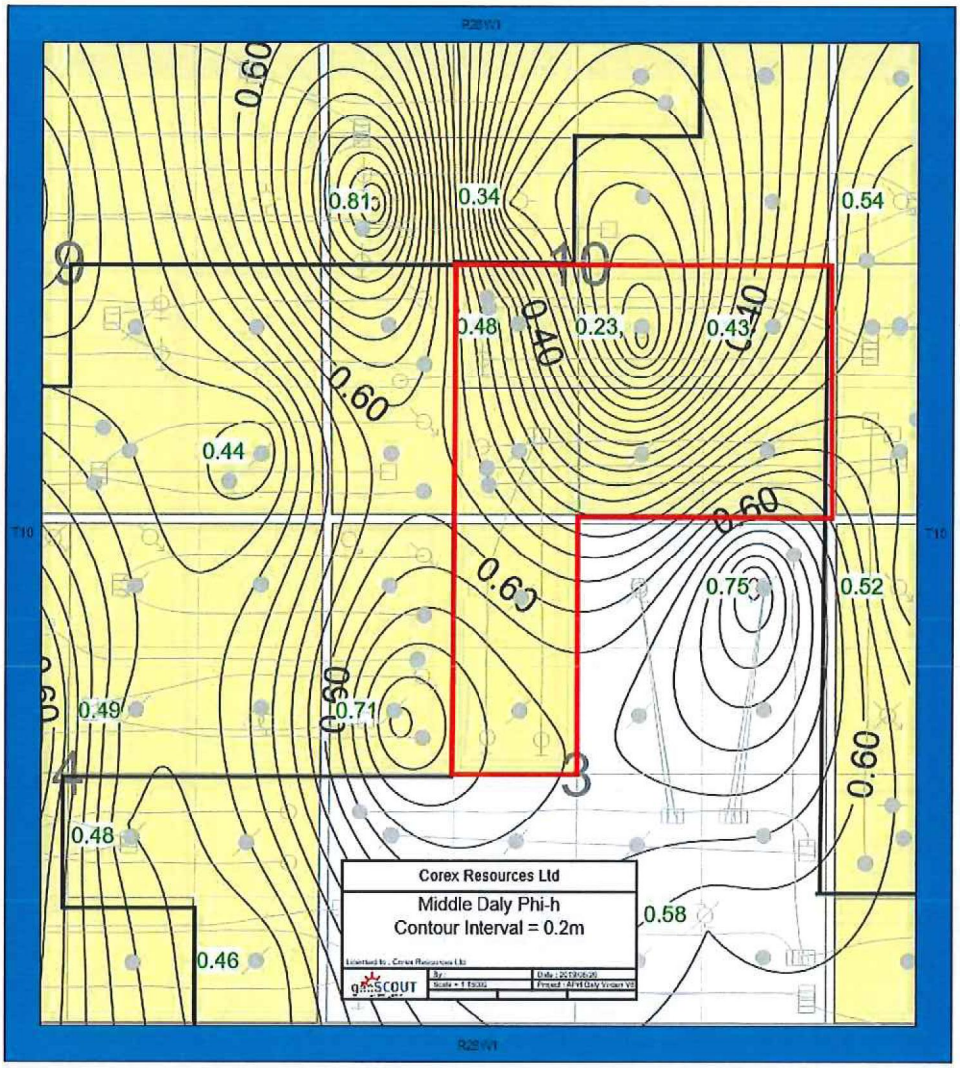
Appendix X – Middle Daly – Isopach



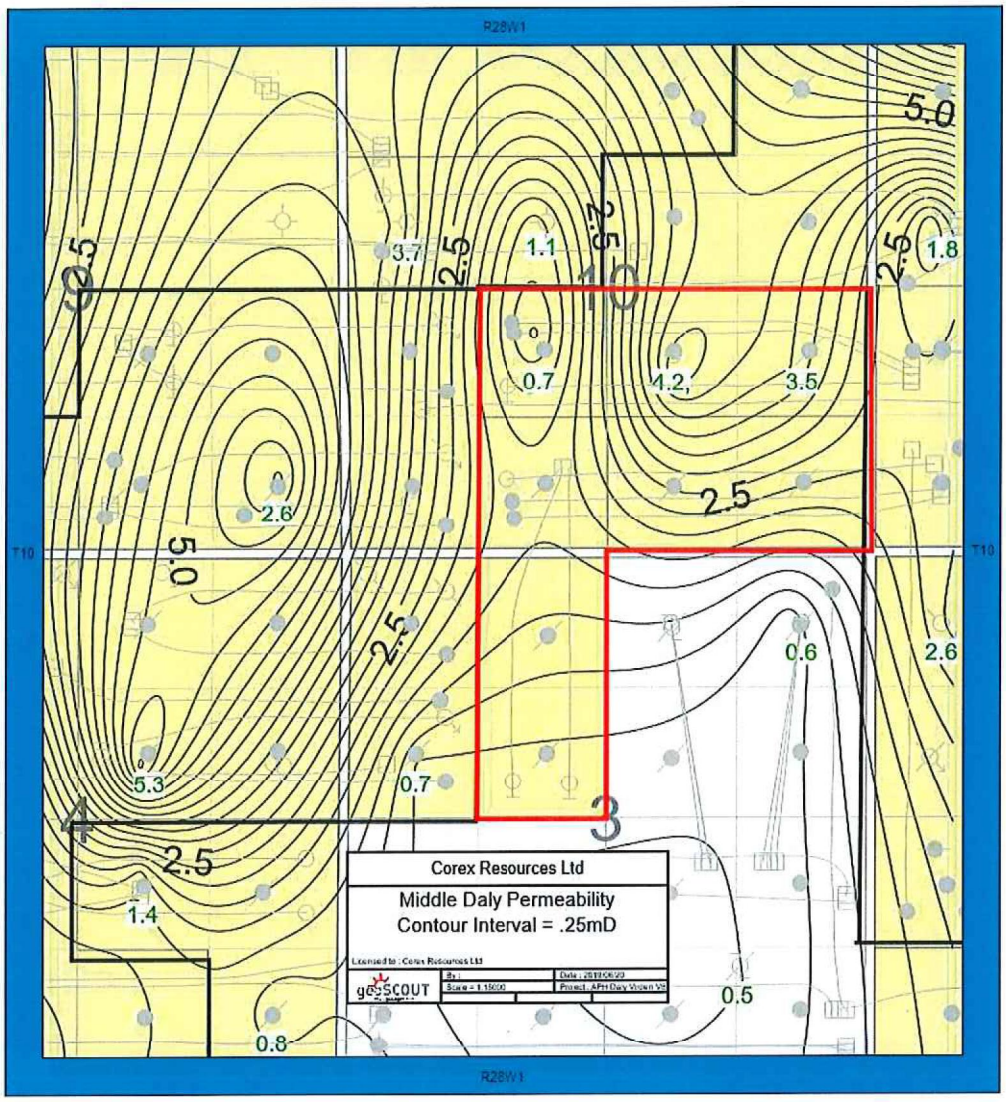
Appendix XI – Middle Daly – Net Pay



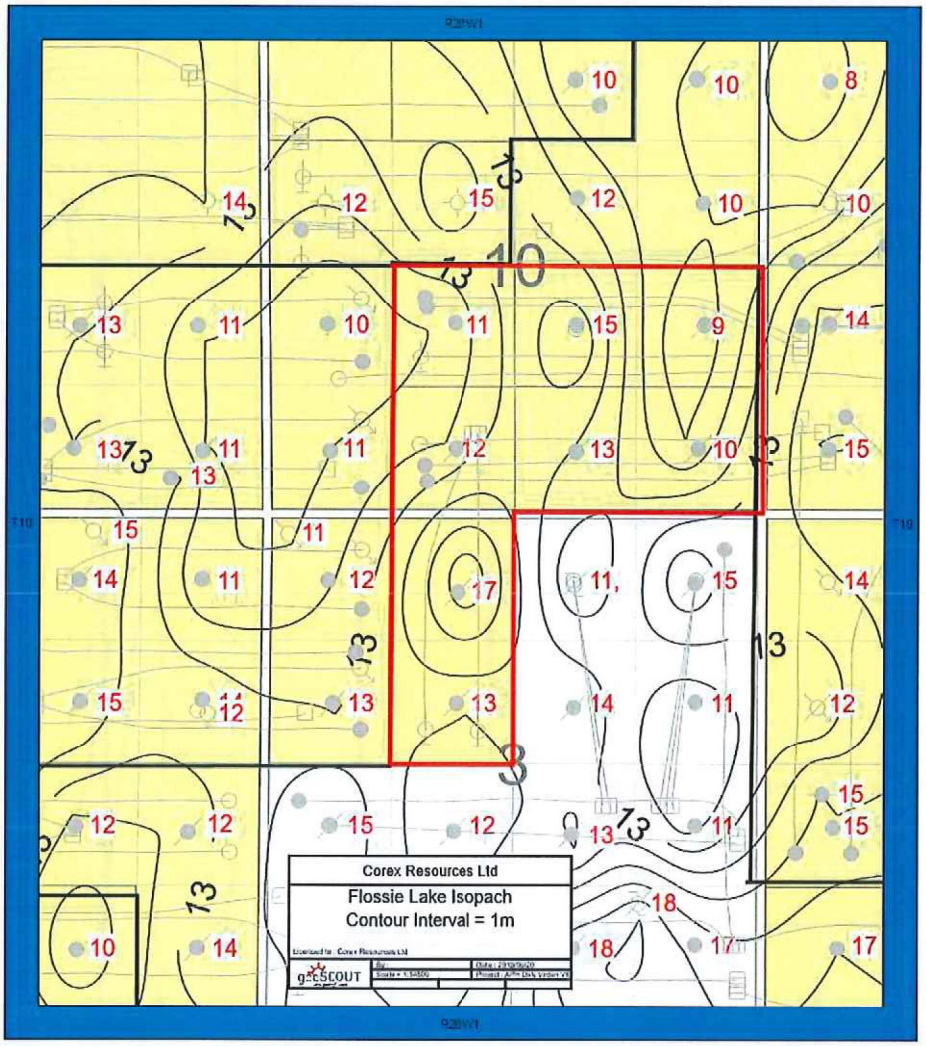
Appendix XII – Middle Daly – Porosity-Thickness



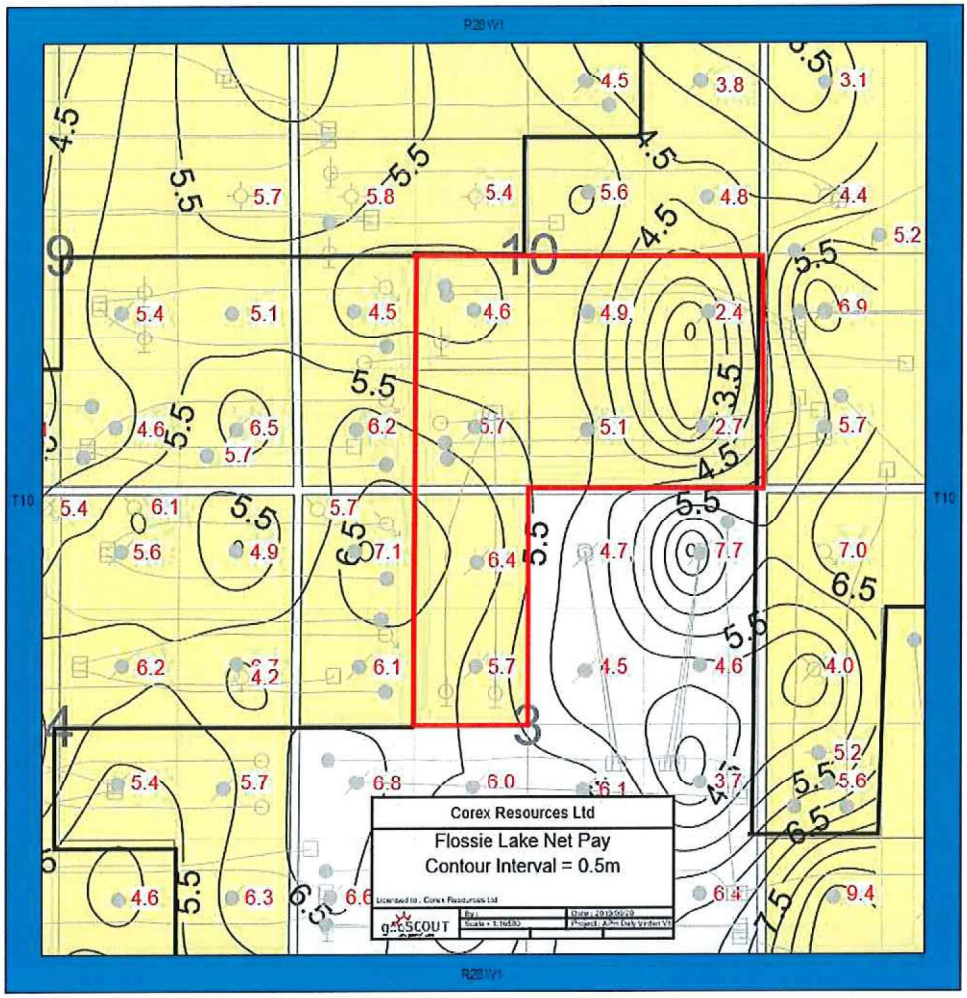
Appendix XIII – Middle Daly – Permeability



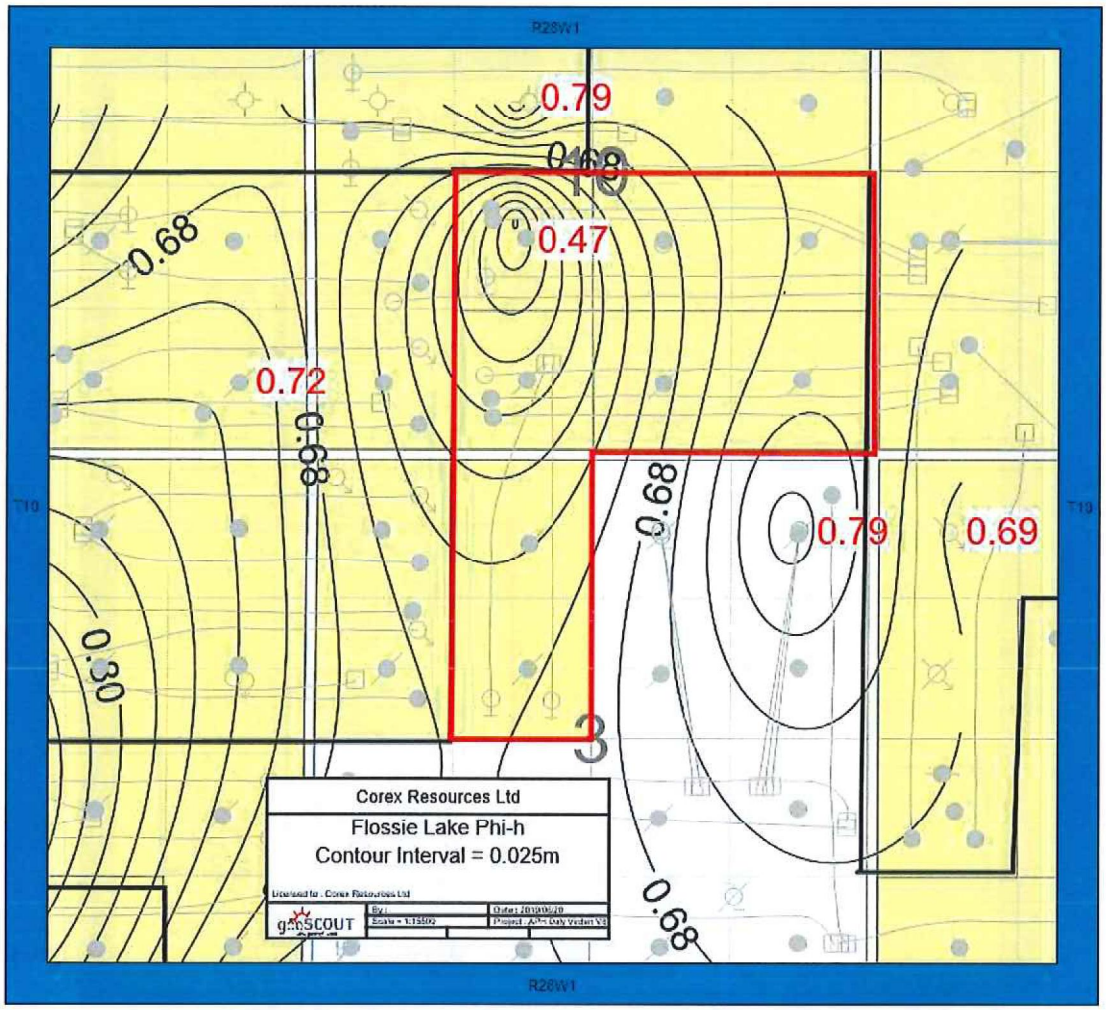
Appendix XIV – Flossie Lake – Isopach



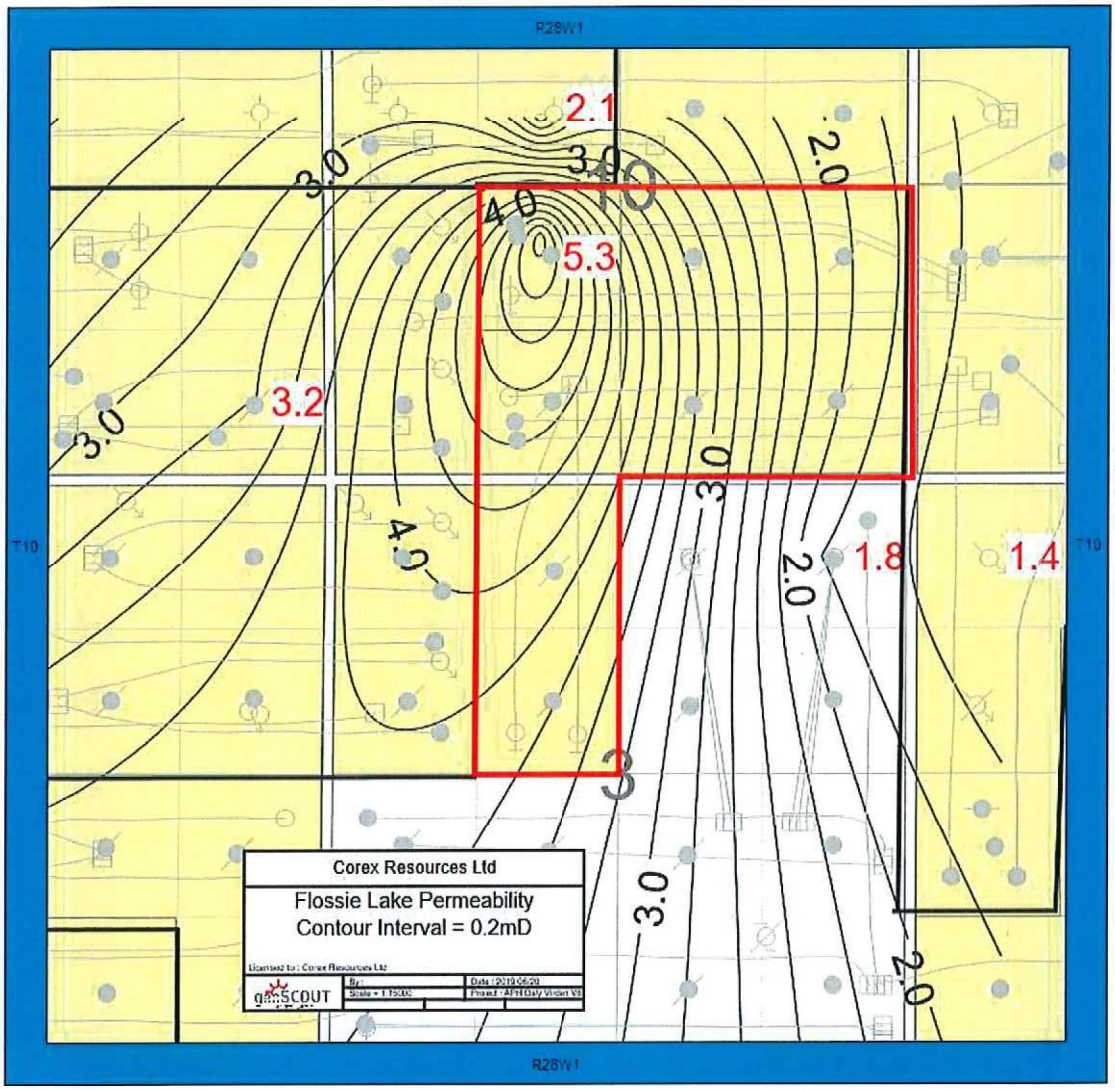
Appendix XV – Flossie Lake – Net Pay



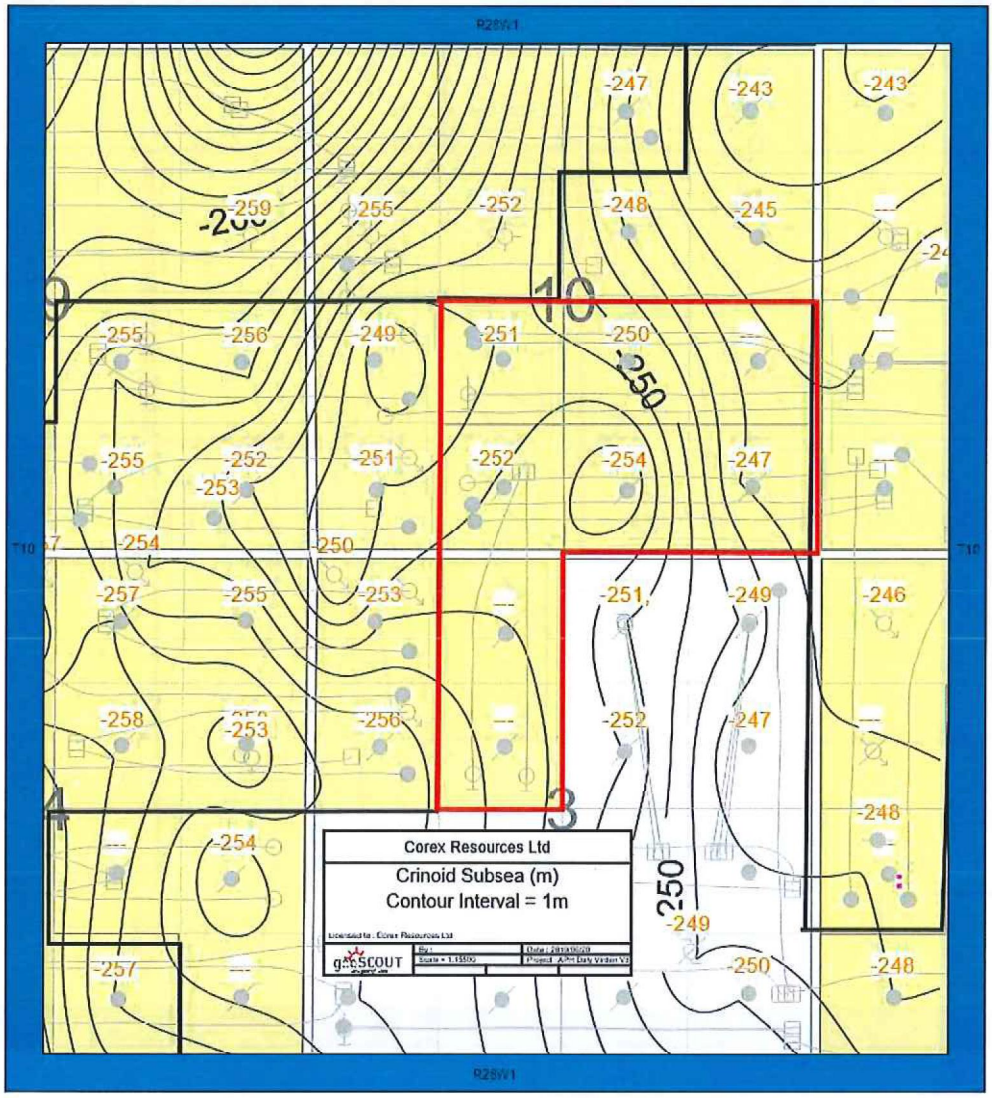
Appendix XVI – Flossie Lake – Porosity-Thickness



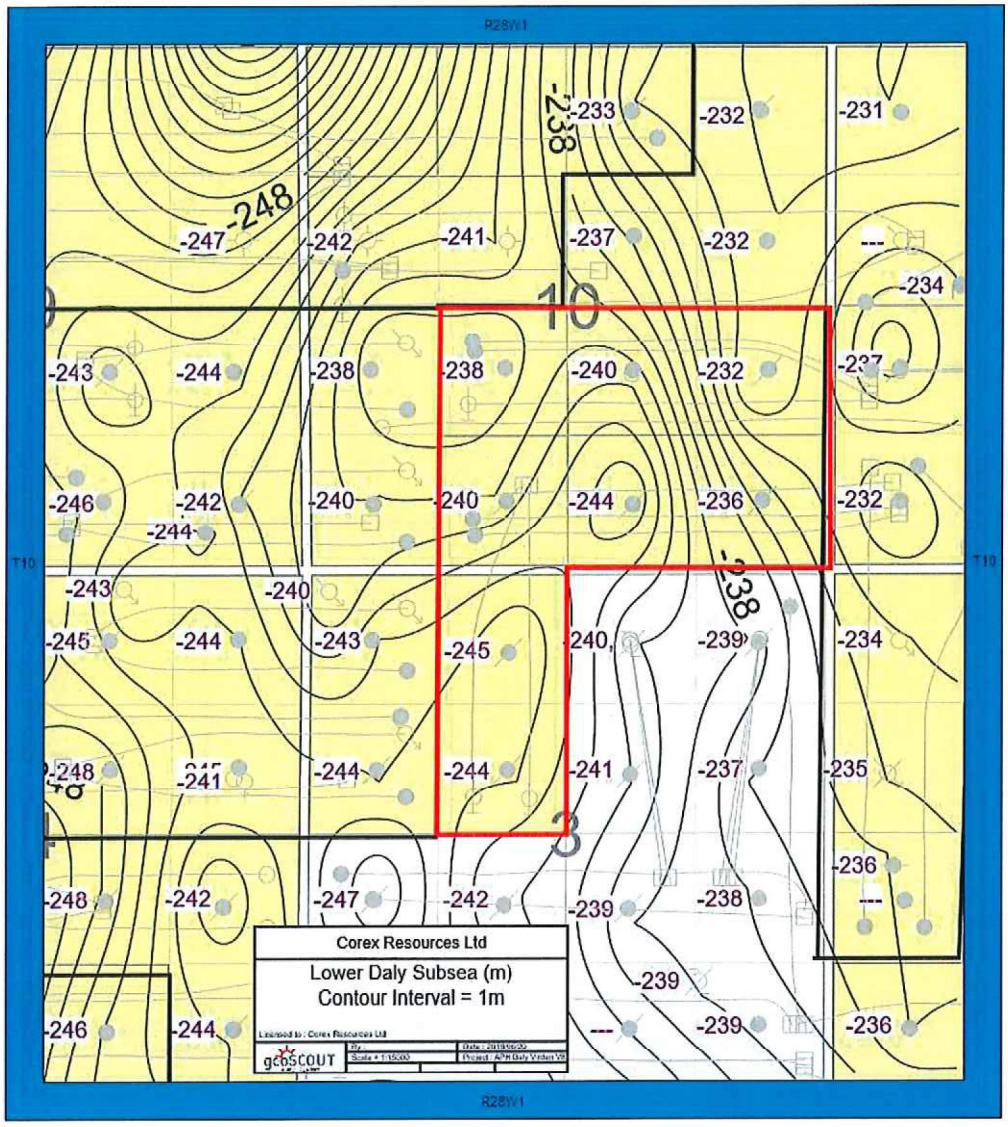
Appendix XVII – Flossie Lake – Permeability



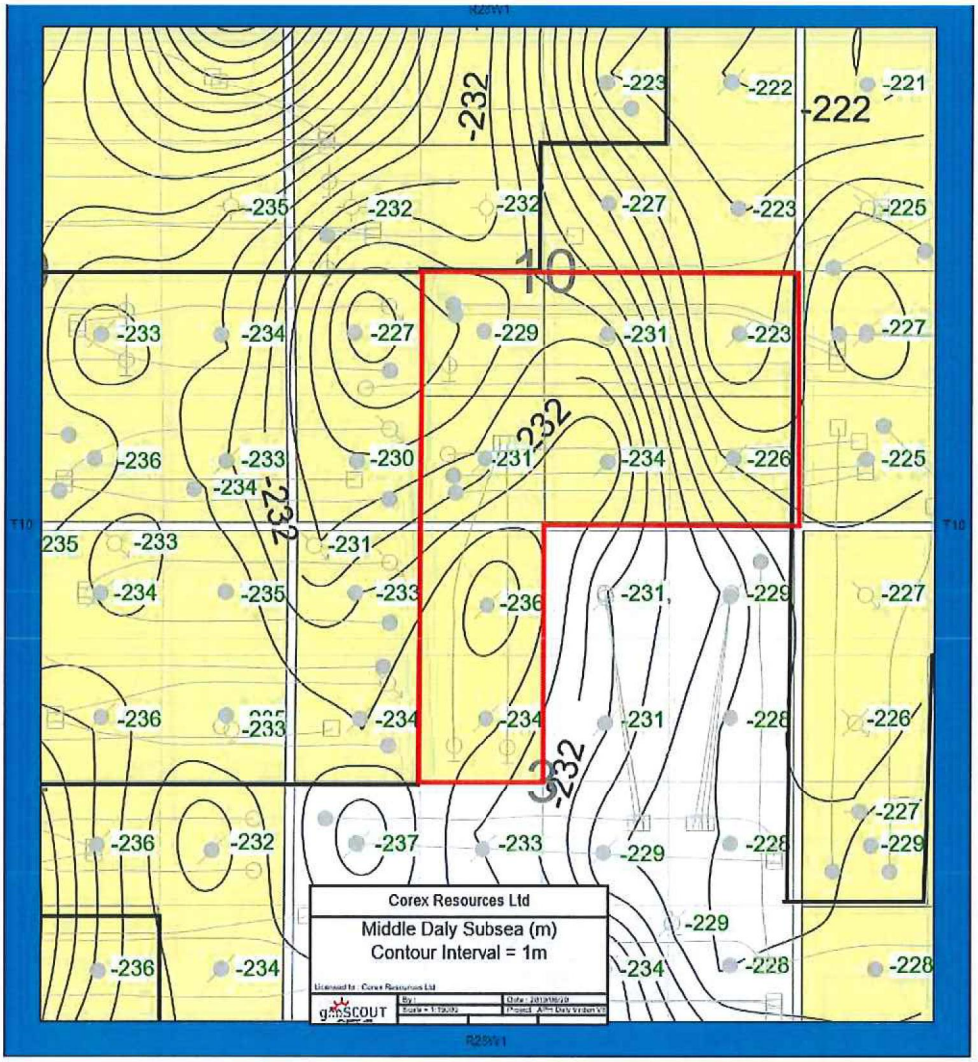
Appendix XVIII – Crinoidal – Top of Structure



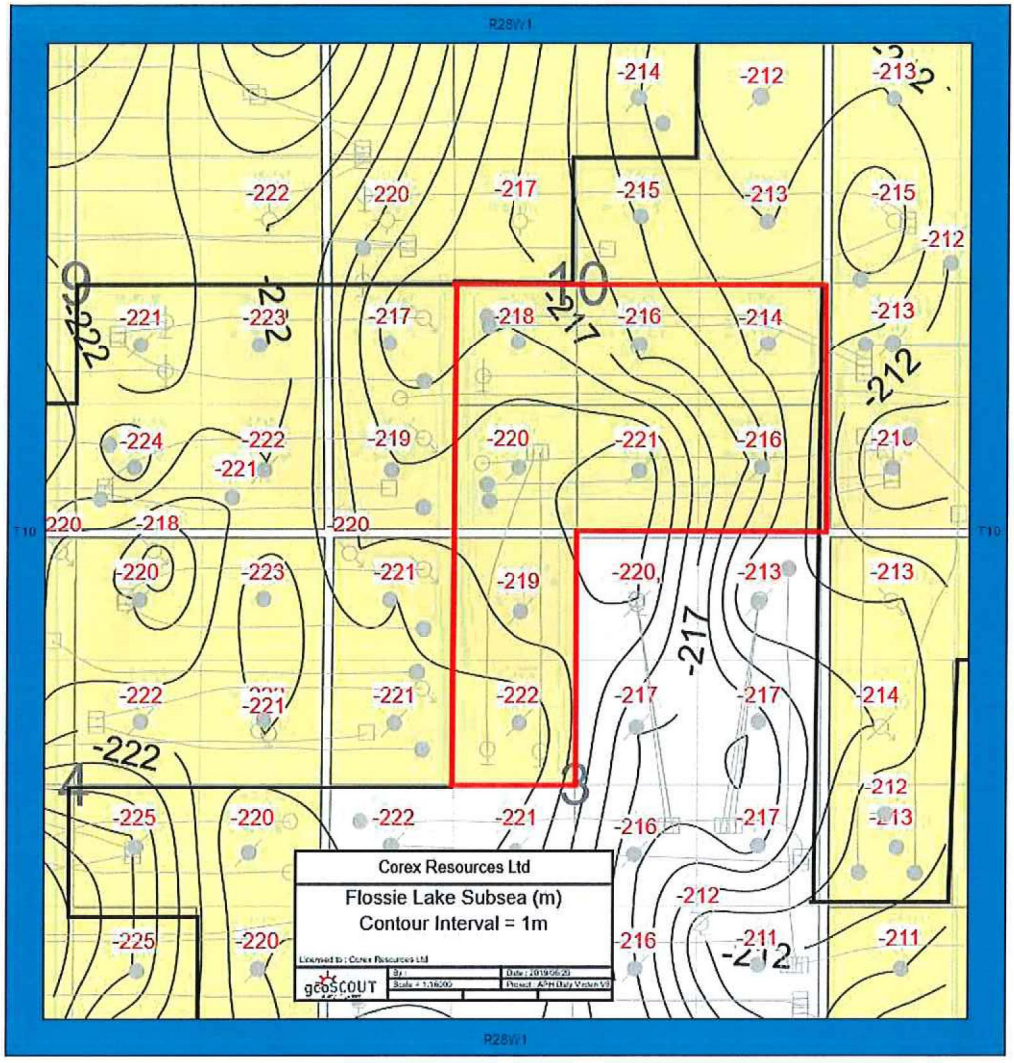
Appendix XIX – Lower Daly – Top of Structure



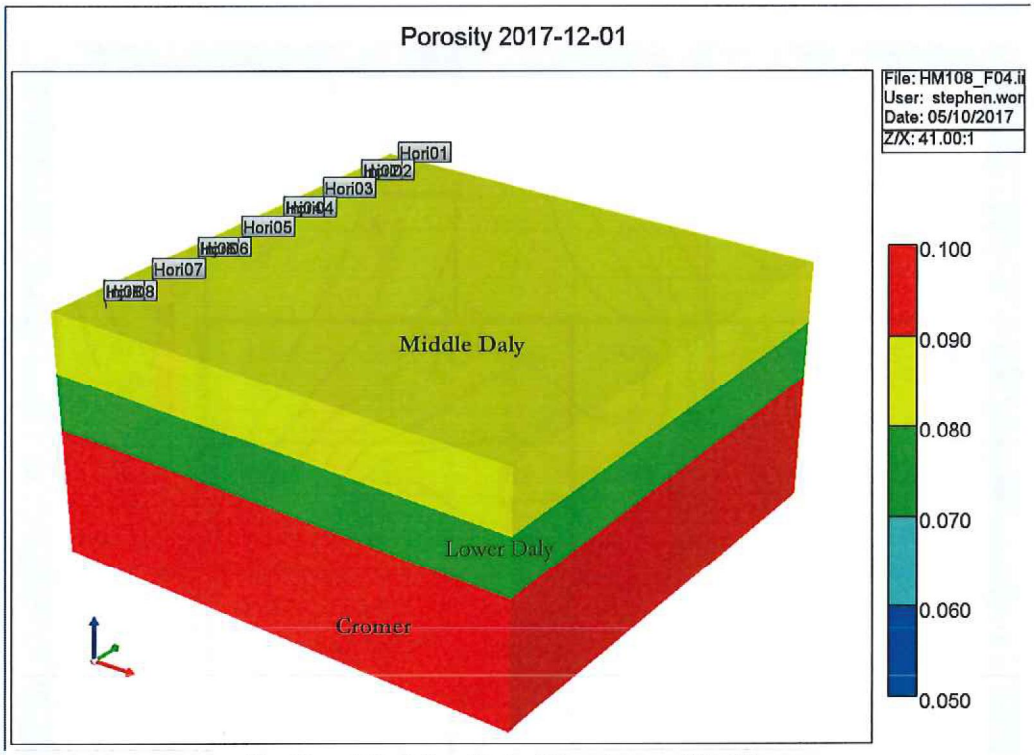
Appendix XX – Middle Daly – Top of Structure



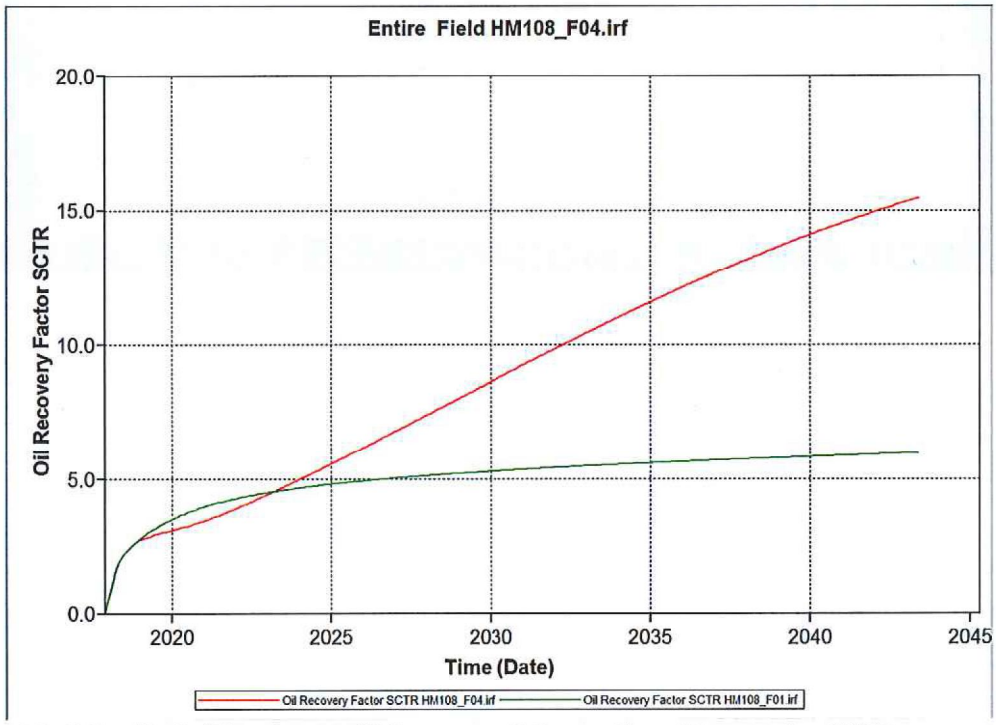
Appendix XXI – Flossie Lake – Top of Structure



Appendix XXII – Daly Members – Section Model



Section Model – Daly Members– 3D View



Section Model – Daly Members – Primary and Secondary Forecast – Oil Recovery Factor versus Time -This Model Was Used to Scale Results for the Daly Unit No. 20 Area