



2006 ANNUAL REPORT

TO

**PRIMARY INDUSTRIES AND
RESOURCES SA
(Petroleum and Geothermal Group)**

ON

**Pipeline Licence 6
RIVERLAND PIPELINE**

March 2007

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1 Introduction

This report is submitted in accordance with the requirements of South Australian Pipeline Licence 6 and the regulatory requirements of the South Australian Petroleum Act and Regulations 2000.

Origin Energy Asset Management (OEAM) operates and manages the Riverland Pipeline on behalf of Envestra Ltd in accordance with the legislative requirements in South Australia, all relevant Codes, Standards and Pipeline Licence 6.

As required by Pipeline Licence 6 an annual review of pipeline operations for the 2006 calendar year is provided herein.

2 Pipeline Throughput

The pipeline throughput for the year 2006 was approximately 885 TJ.

3 Statement of Expenditure

Commercial in Confidence

4 Safety and Environment

There was one reported incident on the Riverland Pipeline during 2006. This involved an encroachment on the pipeline easement in December 2006, which was reported to PIRSA. A landowner installed two fence posts using a tractor mounted auger in the pipeline easement approximately 50m east of the Swan reach boat ramp and they were consequently discovered during a weekly pipeline patrol. The fence posts were installed to a depth of 600mm and the pipeline depth at that location was 1m. The landowner did not use the dial before you dig service. The pipeline markers were readily visible so the landowner lined them up to locate the pipeline, assuming that they were placed directly over the pipeline.

The fence posts have subsequently been removed and the landowner has been cautioned as to the need for and use of the Dial Before You Dig (DBYD) service.

4.1 AS 2885 Risk Assessment

OEAM in conjunction with Epic Energy conducted a 5 yearly AS 2885 Risk Assessment Review of the Riverland Natural Gas Transmission Pipeline in August 2004. The next risk assessment is due in 2009.

4.2 Overpressure Protection System Review

A review of the overpressure protection systems was conducted in 2006. It was found that the pipeline overpressure protection systems were generally adequate although some recommendations for improvement were made. These included:

- Having additional alarms for main line pressure at the Murray Bridge Gate Station.
- Improving the level of information on Piping and Instrumentation Drawings.

- Reviewing the safety integrity level of the overpressure valve system at the Berri Gate station and the Murray Bridge Gate Station.

It is planned to address the actions from this report during 2007.

4.3 Maximum allowable Operating Pressure Review

A review of the Riverland Pipeline Maximum Allowable Operating Pressure (MAOP) was undertaken in 2006 and highlighted some errors in the original construction documentation where the by-pass purge valves at main line valve locations were incorrectly documented as Class 150 valves rather than Class 600 Valves. Field verification of these valves confirmed that they were in fact Class 600.

The current MAOP of the pipeline was found to be driven by the maximum working pressure of the compressor which is 8,619kPa. Based on this, a change will be processed in 2007 to reduce the pipeline MAOP from 10,000kPa to 8,619kPa. The pipeline has not operated at a pressure above 6,000kPa in 2006 and there is no intention to operate the pipeline above this pressure in the near future, so the change in MAOP will have no effect on pipeline operations.

4.4 Environmental Management

To comply with the requirements of Australian Standard AS2885 "Pipelines - Gas & Liquid Petroleum" and the Petroleum Act 2000, OEAM have a Statement of Environmental Objectives (SEO) to aid operators in the management and control of regrowth vegetation along the pipeline easement and these objectives have been complied with. An annual summary of SEO compliance is contained in Annex B. In accordance with the requirements of AS2885, line of sight between pipeline marker posts has been preserved along the pipeline easement to safeguard against any third party damage to the asset.

4.5 Environmental Audits

An environmental audit was commissioned by OEAM to assess the performance of Riverland Pipeline activities in accordance with the requirements of the Riverland Pipeline Licence (PL6) and environmental objectives specified in the SEO for the Riverland Pipeline.

The environmental audit program consisted of an inspection of the Riverland Pipeline and a review of operational systems and programs associated with the ongoing monitoring and measurement of environmental objectives for the Riverland Pipeline. Representatives from Origin Energy participated in both phases of the environmental audit during April and June 2006.

The audit found that activities associated with the operation and maintenance of the Riverland Pipeline are generally being performed in accordance with the environmental objectives specified in the Statement of Environmental Objectives (SEO).

Recommendations for improvement in environmental performance of pipeline activities and environmental conditions were identified during the course of the audit. These related to the general condition of the pipeline corridor, access along the pipeline corridor, the management of overgrown vegetation affecting the line of sight along the corridor, fauna activity and erosion. Recommendations were also made to improve environmental management procedures and training and induction instructions to personnel or contractors engaged to perform work along the pipeline ROW.

To address the audit recommendations vegetation clearance, rectification of erosion and subsidence and improvements to line of sight markers are planned for the first quarter in 2007.

The next annual environmental audit of the pipeline is scheduled to be conducted in April 2007.

5 Inspection and Maintenance Activities

5.1 Routine Inspection and Maintenance

Routine maintenance on the pipeline has been carried out in accordance with the maintenance schedule contained in OEAM's Operations and Maintenance Manual.

5.1.1 Pipeline Inspections and Patrols

All routine pipeline patrols and site inspections of above ground facilities were completed on the Riverland Pipeline System, in accordance with AS2885.3. There were no security breaches at facilities during 2006.

5.1.2 Leakage Surveys & Detection

A dedicated leak detection survey was carried out on the Riverland Pipeline System during August 2006 and identified some minor leaks at meter stations and a minor leak at Main Line Valve 5. The minor leaks at the above ground facilities were all located and repaired.

The leak at MLV5 could not be located within the pit, so the buried Closures flange was excavated and confirmed to be leaking through a pressure plug in the blind flange. An attempt was made to refurbish the fitting, but the leak past the plug was too excessive to remove the blind flange to attach a stopple head and enable removal of the plug. The leaking plug was removed and wrapped in thread tape, which was enough to seal the leak, however the current condition of the Closures Flange will not enable pigging facilities to be attached to the pipeline, so a permanent repair will be required in the future.

Origin Energy has scheduled the next annual leak detection survey in the second half of 2007.

5.1.3 Electrical and Instrumentation

Non-billing electrical/instrumentation equipment, such as pressure switches, battery systems, station pressure and temperature transmitters were maintained as part of the 6 monthly routine maintenance.

Routine 6 monthly pressure control and protective equipment maintenance inspections were carried out at all meter/gate stations on the Riverland Pipeline System. Tasks performed included instrument/pilot gas maintenance, over-pressure isolation valve checks, remote valve operations, active/monitor pressure regulation maintenance and station pressure relief valve operational tests.

5.1.4 Communications

The Riverland Pipeline communications system consists of King Fisher RTU with GPS/GPRS modem attached to the Fisher ROC RTU. The RTUs on the Riverland sites are

communicating to the Master Telemetry Unit at Brompton Gas control over GSM/GPRS. This master telemetry unit will be moved to the Kidman park site in 2007.

Service level agreements (SLA) with relevant service providers provide response and restoration times to attend site to resolve problems.

The communications system associated with the Riverland Pipeline proved reliable throughout 2006, with minimal maintenance requirements.

5.1.5 Mechanical

All scheduled routine mechanical maintenance tasks were completed on the Riverland Pipeline System during 2006. Maintenance tasks included;

- Mainline Valve servicing, station dust filter inspections/replacement, isolation valve operational tests and station Y-Strainer inspections and cleaning.
- Fire extinguisher inspection and maintenance, in accordance with Australian Standards was carried out by a licensed contractor.

5.1.6 Ancillary Equipment

The Angaston compressor unit is owned by Envestra and operated by Epic Energy. Routine maintenance was carried out on the Angaston Compressor unit during 2006. This included routine inspection and testing of the Fisher type regulators, testing of the station relief valves, battery inspection and testing, electrical compliance tests, junction box inspections, meter station instrumentation, compressor unit control / shutdown systems, compressor unit mechanical systems and oil sampling.

Epic Energy will continue to operate and maintain the Angaston Compressor station under the Service Level Agreement with OEAM for a further 2 years.

5.2 Non-Routine Maintenance

Non-routine maintenance carried out in 2006 included:

- Pipeline dig-ups based on the results of the 2005 DCVG survey (refer section 6.1).
- Replacement of a number of sacrificial anodes along the pipeline to improve the level of cathodic protection (refer section 6).
- Finalisation of the asset transfer for the Angaston compressor station between Envestra and Epic Energy.
- Fencing of some minor erosion in a section of the pipeline easement approximately 15km from MLV1 to allow for grass re-vegetation.
- Rectification of erosion on the Murray Bridge lateral near Cambray Creek. With agreement from the landowners culverts were installed to control the water flow from the creek. The cover was also increased in the access road to the property's rear paddocks.

6 Corrosion Control

To mitigate corrosion, the Riverland Pipeline is coated with a protective extruded butyl mastic and polyethylene coating system, which serves to isolate the external pipeline surfaces from corrosive elements in the surrounding environment. Field joints are coated with a polyethylene backed butyl mastic tape system.

Secondary protection at coating holidays and imperfections is achieved by applying cathodic protection.

6.1 Coating

OEAM conducted a DCVG survey on the pipeline system in July 2005 to determine if there were any coating defects on the external surface of the pipe. It was found that the pipeline has a high pipe to soil resistance with coating defects not considered significant when assessed in terms of the percentage reduction of applied cathodic protection.

Based on the results of the DCVG survey, 3 coating defects were excavated in 2006. It was found that the coating damage was caused by white ants. There was no evidence of corrosion on the pipeline.

It is planned to excavate one further defect in 2007. The next scheduled DCVG survey will be carried out in 2010.

6.2 Pipeline Cathodic Protection

The effectiveness of the cathodic protection system was monitored, by carrying out an annual survey. A summary of the results of the most recent surveys is provided in the following paragraphs, with actual data provided in Annex A.

6.2.1 Survey Results

Berri Lateral

Results from the survey indicate protection levels decreased at the Angaston end of the pipeline due to faulty anode connections at KP12.1 and KP15.6, together with significant voltage fluctuations caused by telluric effects. The pipeline therefore did not meet the protection criteria for AS 2832.1:2004. Faulty current shunts were subsequently removed at KP12.1 and KP15.6 and the anodes were bonded directly to the pipeline. Following the anode reconnections and the cessation of telluric activity, levels of protection substantially increased. At KP141.6 the magnesium anode was disconnected as its potential was -780mV.

Interference testing was conducted in conjunction with SA Water and revealed that test locations at KP0.0, KP5.5 and KP7.1 were outside the criteria as set out in AS 2832.1:2004 and unit outputs may need to be reduced. Further contact is required with SA Water to determine what mitigative measures are required subject to South Australian Electrolysis Committee guidelines.

The Epic Energy Impressed Current Cathodic Protection unit (ICCP) at the Angaston Metering Station was also considered to be potentially affecting pipeline protection levels at this location.

Tooravale and Visyboard Lateral

Results from the survey indicate pipeline protection levels have increased since the August 2005 survey and the line is cathodically protected. Varistors installed inside the test points across the inlet insulating flanges at both VisyBoard and Tooravale Metering Stations were assessed and found to be satisfactory.

Murray Bridge Lateral

Results from the survey indicate pipeline protection levels have marginally decreased between KP18.3 and KP23.3, resulting in the pipeline being not cathodically protected at these locations. Some telluric activity was noted during the survey period.

National Dairies Lateral

Results from the survey indicate pipeline protection levels have increased since the August 2005 survey and the line is cathodically protected.

6.2.2 CP Corrective Maintenance Work

Subsequent to the pipeline potential survey being carried out in February 2006 the following actions have been taken:

- An investigation was carried out which confirmed that the close proximity of the Epic ground bed at the Angaston metering station has an effect on pipeline potentials at this location. This will continue to be monitored.
- New anodes were installed at KP 48.9, KP 56.2, KP 70.8 and KP 82 on the Berri Lateral.
- New anodes were installed at KP 9.2, KP 48.9, KP 57.1 and KP 62.6 on the Murray Bridge Lateral.

7 Right of Way Management

7.1 Right of Way Patrols

In accordance with the maintenance schedule, ground patrols were carried out weekly within the townships of Murray Bridge, Swan Reach and Angaston. Ground Patrols were carried out monthly of the entire pipeline route and aerial patrols were carried out quarterly.

7.2 Signage

All signage on the Riverland Pipeline System is installed in accordance with AS2885 and maintains "Line of Sight". The pipeline signage is monitored and replaced as required, as part of the routine patrol duties by OEAM's Field Maintenance Officers or the permanent contractors based in the Berri and Murray Bridge regions.

Compound signage providing contact details, emergency "Toll Free" numbers, site location and "HAZCHEM" details are installed at all facilities on the Riverland Pipeline System. This signage is maintained in conjunction with routine activities.

7.3 Landholder Contacts

There are 116 landowners and occupiers along the Riverland Pipeline and laterals. During 2006, notices were sent to landowners and occupiers along the pipeline route in relation to cathodic protection and leakage surveys.

A property owner contact scheme is in place to visit each owner or occupier annually. This is to ensure that ongoing communication is maintained with landowners and occupiers and to identify and address any issues arising. Additional contacts were made with respective landholders and/or occupiers in the course of routine pipeline operations and maintenance activities (eg: corrosion surveys through properties, line valve maintenance, routine patrols).

All land owners / occupiers were visited in November 2006 during which time their obligations to the pipeline easement, general pipeline safety and their awareness of the location of the pipe through their property were discussed.

Landowners were provided with information on pipeline safety and the 'Dial Before You Dig' procedure.

7.4 Community Awareness Program

In addition to the landowner visits, a formal Community Awareness Programme for the Riverland Pipeline is also in place. The awareness programme involves visiting fire authorities, police, ambulance, councils, earthmoving contractors and various community members and highlighting pipeline safety and awareness. The focus of the visits is to improve their awareness of pipeline operations and to provide the community with key contacts to enable sound management of activities in the vicinity of the pipeline assets.

To further ensure a sufficient level of community awareness exists in relation to the pipeline, 6-monthly newspaper advertisements are placed in local newspapers advising the existence of the pipeline, including relevant emergency contact information.

Regular pipeline surveillance and patrols are carried out by both OEAM staff and local contract representatives who live and work in these regional communities.

7.5 Pipeline Location Service

OEAM provides a free service to locate its pipelines for other utilities and third parties carrying out civil work in the vicinity. This is administered through the Dial Before You Dig (1100) organisation. All locations requests result in supervision of third party activity within the pipeline easement. All works carried out within the pipeline easement were conducted under OEAM's "Work Permit System". The works are constantly supervised to ensure the safety and integrity of the pipeline system and personnel.

8 Emergency Management

8.1 Emergency Response Plan

The Emergency Response Plan (which is now a combined plan for the Riverland and Berr-Mildura Pipelines) was reviewed and updated in November 2006, with recommendations from the May 2006 emergency exercise considered.

8.2 Emergency Response Exercise

Pipeline Licence 6 requires a practice drill to be conducted and reported every two years on the Riverland Pipeline System. The last emergency exercise conducted for the Riverland and Berri to Mildura Pipeline System occurred in May 2006. The emergency exercise was a desktop exercise and was completed with positive outcomes for the given scenario. Recommendations were made as a result of the exercise, to further improve the emergency response procedures and the competencies of National Pipelines Group (NPG) and its personnel. The only outstanding recommendation from the emergency exercise is to develop a re-pressurisation procedure for the pipeline. This will be completed in 2007.

9 Compliance Issues

9.1 Compliance Audit

An annual audit is undertaken to assess compliance of the Riverland Pipeline with Pipeline Licence conditions and the operational requirements of AS 2885.3 - 2001. The 2006 audit was conducted by OEAM in May 2006. It included a field audit to assess compliance of the facilities with AS 2885.3 Section 5.

The scope of the audit was to review the pipeline licence conditions, emergency management processes, safety and operating plan, records management, and an inspection of the physical asset.

It was found that some updates were required to documentation including the Safety and Operating Plan (SAOP), Emergency Response Plan (ERP), Alarm Management Manual and operating procedures. The ERP has since been updated, the SAOP and Alarm Management Manual are in the process of a major review with issue expected in early 2007. Operating procedures are continually reviewed and updated.

Some electrical compliance issues were raised and a review of earthing, hazardous zone compliance and electrical leads at RCD units was recommended. Work to rectify electrical non-compliances will commence in 2007. Recommendations were also made to improve signage at meter stations and valve pits and to address some minor site maintenance issues at facilities.

The next operations audit has been scheduled for May 2007. The purpose of the audit will be to ensure compliance with the Riverland Pipeline Safety and Operating Plan.

10 Management Systems

OEAM utilises a number of management systems to ensure effective operations and management of the pipeline. Some of these are listed below:

- An Origin Energy Health Safety and Environment Management System that governs all Origin Energy operations as they impact occupational health, safety and environmental matters.
- A risk management system to ensure that hazards are identified and risks evaluated and managed. Hazards are identified using HAZOPs, safety reviews, job safety analysis, incident reports and investigations, audits and inspections together with the AS2885 risk assessment.
- A National Gas Transmission Pipeline Operations and Maintenance Procedure Manual containing nationally recognised standards and practices for the operation and maintenance of transmission pipelines managed by OEAM. These are continually reviewed and periodically updated as appropriate.
- A National Asset Protection Operations and Maintenance Manual containing nationally recognised standards and practices for activities such as coatings, pipeline patrols, leakage management, cathodic protection, earthing and DCVG surveys.
- A Document Management System which allows the controlled updating, distribution and viewing of pipeline documentation.
- A Management of Change System that assesses proposed changes to the pipeline across all engineering disciplines, operational parameters and documentation. This system interfaces with the Document Management System to ensure relevant documentation affected by the change is updated and distributed.
- An audit program that assesses contractor and operational management performance.

11 Reports generated in 2006

The following reports were generated during 2006;

- PL6 Annual Report for 2006, submitted in March 2007;
- Quarterly Compliance with SEO Reports
- Pipeline Licence PL6 Environmental Audit report April 2006
- Riverland Gas Transmission Pipeline Cathodic Protection Potential Survey February 2006
- Riverland and Berri-Mildura Transmission Pipeline 2006 Emergency Response Exercise BMP 06 May 2006
- 5 Yearly MAOP Review Report September 2006
- 5 Yearly Over Pressure Protection System Review Engineering Report September 2006

12 Known or foreseeable Activities affecting the pipeline

The increase in gas demand on the Berri-Mildura pipeline has prompted an investigation into an additional compressor station on this pipeline. A new compressor on Berri-Mildura pipeline will have an effect on the operation of the Angaston compressor. The investigation should be completed in 2007.

The bypassing plug at the MLV 5 Closures flange prevents pigging of the pipeline in its current state. An investigation into whether any of the other five Closures flanges on the pipeline are bypassing will be conducted in 2007. Options for refurbishing the leaking flange at MLV 5 will also be investigated.

13 Future Operations

Future operations planned for the next 24 months include:

- Emergency Response Exercise.
- Conduct a technical audit against the pipeline's Safety and Operating Plan.
- Continue environmental monitoring and audits as required by the Statement of Environmental Objectives for the pipeline.
- Continue routine inspection and maintenance activities, including regular liaison with landowners and third parties along the pipeline route.
- Continue community awareness seminars with all landowners, occupiers and interested third parties.
- Continue monitoring the level of cathodic protection along the entire pipeline and install additional anodes to raise protection levels in some areas.
- Carry out earth bed resistance checks at all zinc earthing beds.
- Conduct a leakage survey of the entire pipeline (planned for second half of 2007).
- Excavate one further defect based on the results of the 2005 DCVG survey.
- Relocation of the Master telemetry unit from Brompton to Kidman Park.

ANNEX A : PIPELINE CATHODIC PROTECTION POTENTIALS PROFILES

Potential Summary for Berri Lateral February 2006

Date	Test Point Number	Location	Potential February 2006		Measurement Type
			On Potential	Under Value	
February-06	1	Angaston M/S outlet (D/S) - Berri Lateral	-1400	-850	Spot
February-06	2	Zn	-1003	-850	Spot
February-06	3	Crennis Mines Rd	-895	-850	Spot
February-06	4	Mg anode (Long Gully Rd)	-842	-850	Spot
February-06	5		-850	-850	Spot
February-06	6	Mg anode	-856	-850	Spot
February-06	7		-943	-850	Spot
February-06	8	Lindsay Park Stud (In driveway)	-921	-850	Spot
February-06	9	Mg anode Collingrove Rd	-950	-850	Spot
February-06	10	Bitumen Rd	-856	-850	Spot
February-06	11	Mitchells Paddock	-550	-850	Spot
February-06	12	Mg anode Mt Eagle Rd	-980	-850	Spot
February-06	13	Henshke Rd	-860	-850	Spot
February-06	14	White Gates Rd	-930	-850	Spot
February-06	15	Mg anode - Do not enter this property	-895	-850	Spot
February-06	16	without first contacting owner	-835	-850	Spot
February-06	17	Joe Keynes, phone 085648235	-853	-850	Spot
February-06	18	Check if tracks are not too wet	-810	-850	Spot
February-06	19	Joe Keynes house is located at	-810	-850	Spot
February-06	20	farm property at Keyneton, off	-725	-850	Spot
February-06	21	main Keyneton to Sedan Rd	-610	-850	Spot
February-06	22	SA water pipe	-530	-850	Spot
February-06	23	MLV 2 Sedan Junction - Murray Bridge	-660	-850	Spot
February-06	24	Mg anode Old house	-770	-850	Spot

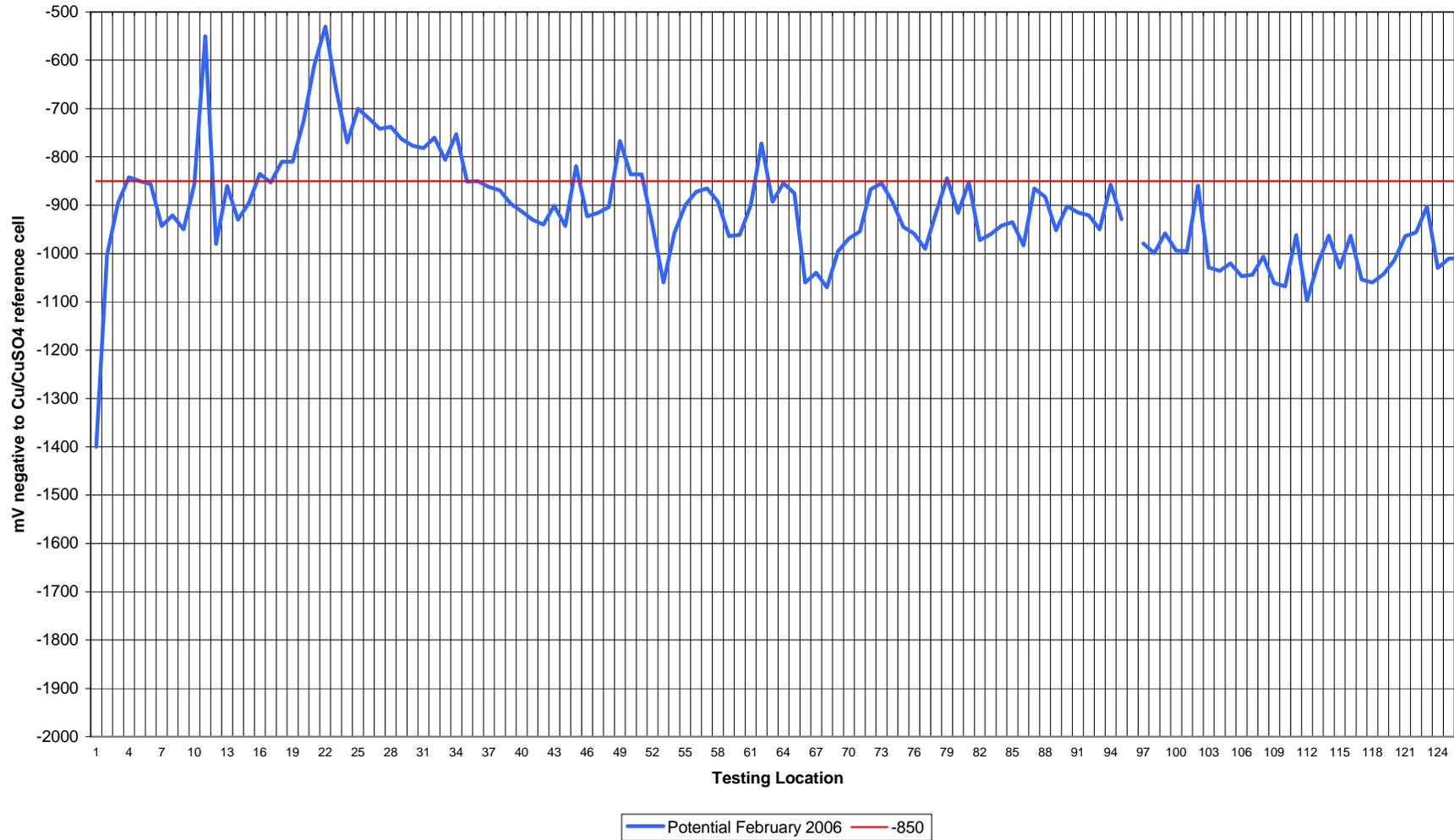
Date	Test Point Number	Location	Potential February 2006		Measurement Type
February-06	25	Exits paddock	-700	-850	Spot
February-06	26		-720	-850	Spot
February-06	27		-742	-850	Spot
February-06	28	Bitumen Rd	-738	-850	Spot
February-06	29	Red tape on tree	-763	-850	Spot
February-06	30	Cross Rd	-777	-850	Spot
February-06	31		-782	-850	Spot
February-06	32	Mg anode	-760	-850	Spot
February-06	33		-806	-850	Spot
February-06	34		-753	-850	Spot
February-06	35		-851	-850	Spot
February-06	36		-850	-850	Spot
February-06	37		-862	-850	Spot
February-06	38		-869	-850	Spot
February-06	39		-897	-850	Spot
February-06	40		-913	-850	Spot
February-06	41		-930	-850	Spot
February-06	42		-940	-850	Spot
February-06	43		-901	-850	Spot
February-06	44		-943	-850	Spot
February-06	45		-819	-850	Spot
February-06	46		-923	-850	Spot
February-06	47	MLV 3	-916	-850	Spot
February-06	48	Zn earthing	-904	-850	Spot
February-06	49		-767	-850	Spot
February-06	50		-836	-850	Spot
February-06	51	River bank - D/S side	-836	-850	Spot
February-06	52	MLV 4	-941	-850	Spot
February-06	53	Mg anode	-1060	-850	Spot
February-06	54		-958	-850	Spot
February-06	55		-900	-850	Spot

Date	Test Point Number	Location	Potential February 2006		Measurement Type
February-06	56		-872	-850	Spot
February-06	57		-865	-850	Spot
February-06	58		-893	-850	Spot
February-06	59		-964	-850	Spot
February-06	60		-961	-850	Spot
February-06	61		-900	-850	Spot
February-06	62		-772	-850	Spot
February-06	63		-893	-850	Spot
February-06	64		-854	-850	Spot
February-06	65		-875	-850	Spot
February-06	66		-1060	-850	Spot
February-06	67		-1040	-850	Spot
February-06	68		-1070	-850	Spot
February-06	69		-995	-850	Spot
February-06	70		-969	-850	Spot
February-06	71		-954	-850	Spot
February-06	72		-867	-850	Spot
February-06	73		-854	-850	Spot
February-06	74		-893	-850	Spot
February-06	75		-945	-850	Spot
February-06	76		-959	-850	Spot
February-06	77	Mg anode	-990	-850	Spot
February-06	78		-916	-850	Spot
February-06	79		-844	-850	Spot
February-06	80		-916	-850	Spot
February-06	81		-852	-850	Spot
February-06	82		-972	-850	Spot
February-06	83		-960	-850	Spot
February-06	84		-942	-850	Spot
February-06	85	MLV 5 Mg anode	-935	-850	Spot
February-06	86	Zn earthing (near MLV)	-983	-850	Spot

Date	Test Point Number	Location	Potential February 2006		Measurement Type
February-06	87		-865	-850	Spot
February-06	88		-883	-850	Spot
February-06	89		-952	-850	Spot
February-06	90		-902	-850	Spot
February-06	91		-915	-850	Spot
February-06	92		-921	-850	Spot
February-06	93		-950	-850	Spot
February-06	94		-857	-850	Spot
February-06	95		-929	-850	Spot
February-06	96			-850	Spot
February-06	97		-979	-850	Spot
February-06	98		-999	-850	Spot
February-06	99		-958	-850	Spot
February-06	100		-994	-850	Spot
February-06	101		-995	-850	Spot
February-06	102		-859	-850	Spot
February-06	103		-1029	-850	Spot
February-06	104		-1036	-850	Spot
February-06	105	MLV 6	-1020	-850	Spot
February-06	106	Zn earthing	-1047	-850	Spot
February-06	107	River bank - U/S	-1044	-850	Spot
February-06	108	Mg anode	-1006	-850	Spot
February-06	109		-1061	-850	Spot
February-06	110	MLV 7 - track to rubbish dump	-1068	-850	Spot
February-06	111		-962	-850	Spot
February-06	112		-1098	-850	Spot
February-06	113		-1020	-850	Spot
February-06	114	Mg anode	-963	-850	Spot
February-06	115		-1029	-850	Spot
February-06	116		-963	-850	Spot
February-06	117	Cnr Rumball & Puddletown Rd	-1054	-850	Spot

Date	Test Point Number	Location	Potential February 2006		Measurement Type
February-06	118	Zn earthing	-1060	-850	Spot
February-06	119	Cnr Dalziell & Mander Rd - Zn earthing	-1043	-850	Spot
February-06	120	Old TP	-1014	-850	Spot
February-06	121	Spendiff Rd - Zn earthing	-964	-850	Spot
February-06	122	Spendiff Rd - Zn earthing	-956	-850	Spot
February-06	123	Old TP	-903	-850	Spot
February-06	124	Mg anode - Dalziell Rd	-1030	-850	Spot
February-06	125	Berri M/S - MLV 8	-1010	-850	Spot
February-06	126	Berri M/S - Inlet U/S	-1010	-850	Spot

Potential Summary and Graph for Berri Lateral February 2006

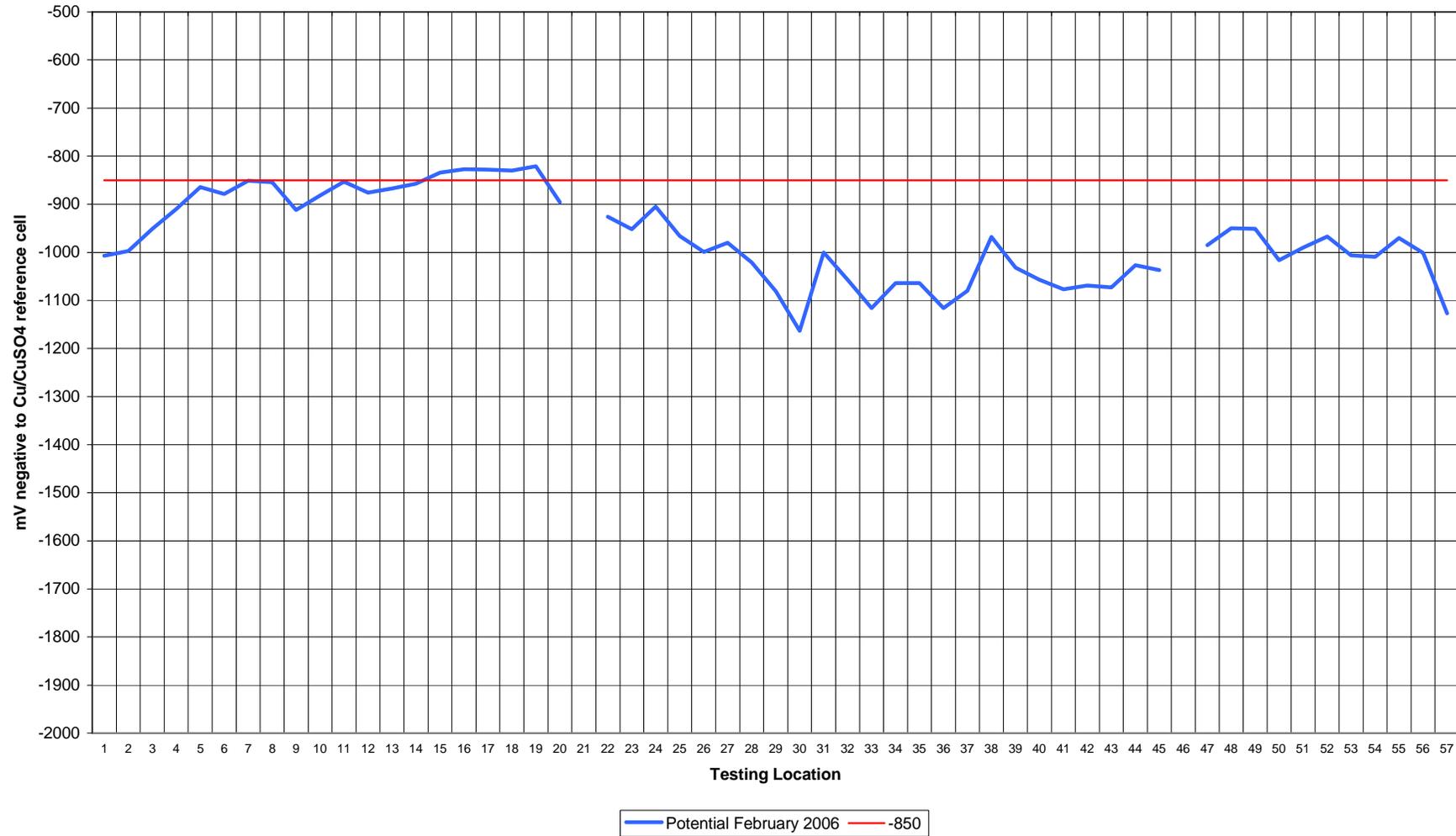


Potential Summary for Murray Bridge Lateral February 2006

Date	Test Point Number	Location	Potential February 2006		Measurement Type
			On Potential	Under Value	
February-06	1	MLV 1 Sedan Junction	-1007	-850	Spot
February-06	2	Mg anode	-997	-850	Spot
February-06	3		-951	-850	Spot
February-06	4		-910	-850	Spot
February-06	5		-864	-850	Spot
February-06	6		-879	-850	Spot
February-06	7		-851	-850	Spot
February-06	8		-854	-850	Spot
February-06	9		-912	-850	Spot
February-06	10	Enter & exit gate (east)	-882	-850	Spot
February-06	11	pipe leaves paddock	-853	-850	Spot
February-06	12		-876	-850	Spot
February-06	13	Mg anode	-867	-850	Spot
February-06	14		-857	-850	Spot
February-06	15		-834	-850	Spot
February-06	16		-827	-850	Spot
February-06	17		-828	-850	Spot
February-06	18		-830	-850	Spot
February-06	19	Enter & exit gate	-821	-850	Spot
February-06	20	Enter & exit gate by KP 23.3	-896	-850	Spot
February-06	21	Mg anode- NO ENTRY (owner request)		-850	Spot
February-06	22		-926	-850	Spot
February-06	23		-952	-850	Spot
February-06	24		-905	-850	Spot
February-06	25	Mg anode	-966	-850	Spot
February-06	26		-999	-850	Spot
February-06	27		-980	-850	Spot
February-06	28		-1021	-850	Spot
February-06	29	Mg anode	-1081	-850	Spot

Date	Test Point Number	Location	Potential February 2006		Measurement Type
February-06	30	Adjacent Mannum - Whyalla pipeline	-1163	-850	Spot
February-06	31	Pfeiffer Rd - Zn earthing	-1000	-850	Spot
February-06	32	Mg anode	-1057	-850	Spot
February-06	33		-1116	-850	Spot
February-06	34	Pfeiffer Rd - Zn earthing	-1064	-850	Spot
February-06	35	Old TP	-1064	-850	Spot
February-06	36		-1116	-850	Spot
February-06	37	Mg anode: Reedy Creek	-1080	-850	Spot
February-06	38	Mannum Murray Bridge Rd	-968	-850	Spot
February-06	39		-1032	-850	Spot
February-06	40		-1057	-850	Spot
February-06	41	Zn earthing	-1077	-850	Spot
February-06	42	Old TP	-1069	-850	Spot
February-06	43		-1073	-850	Spot
February-06	44	2 gates, 2nd fence line	-1027	-850	Spot
February-06	45	gate opposite KP 53 Ring Grant for	-1037	-850	Spot
February-06	46	ride into his property phone no.		-850	Spot
February-06	47	08 8532 3325	-985	-850	Spot
February-06	48	Wilkin Rd - Zn earthing	-950	-850	Spot
February-06	49	Old TP	-951	-850	Spot
February-06	50	Stone fence road	-1016	-850	Spot
February-06	51		-990	-850	Spot
February-06	52	Via gate on Bigmore Rd	-967	-850	Spot
February-06	53	Bigmore Rd - Zn earthing	-1006	-850	Spot
February-06	54	Old TP	-1009	-850	Spot
February-06	55	Nilpeena Rd - Zn earthing	-970	-850	Spot
February-06	56	Old TP - Mg anode	-1001	-850	Spot
February-06	57	Murray Bridge M/S Inlet (U/S)	-1127	-850	Spot

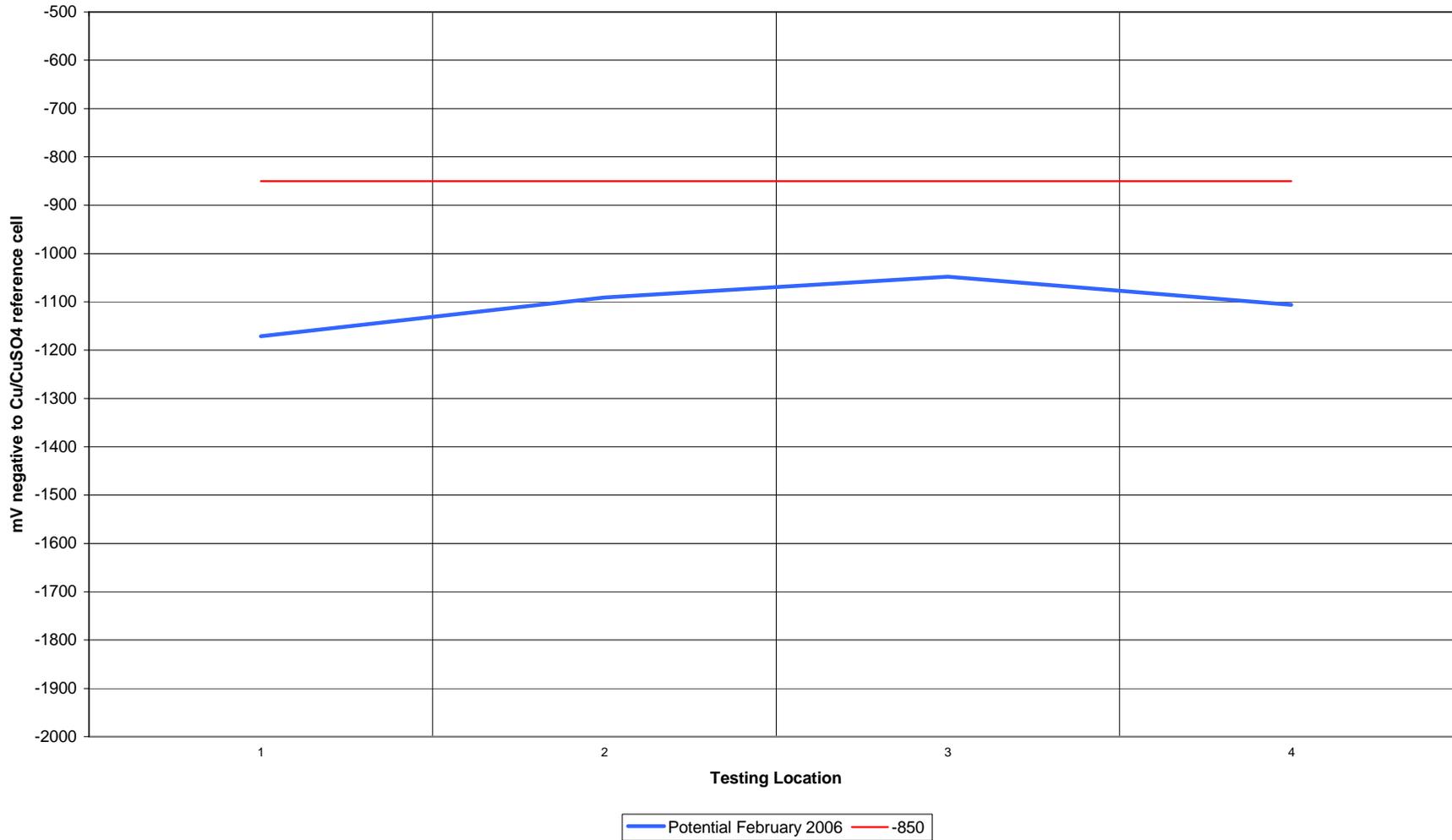
Potential Summary and Graph for Murray Bridge Lateral February 2006



Potential Summary for Tooravale - Visy Lateral February 2006

Date	Test Point Number	Location	Potential February 2006		Measurement Type
			On Potential	Under Value	
February-06	1	Berrivale Orchards M/S Outlet D/S	-1171	-850	Spot
February-06	2	VisyBoard M/S - Inlet U/S	-1091	-850	Spot
February-06	3	Test post along Tooravale Rd	-1048	-850	Spot
February-06	4	Tooravale M/S- Inlet U/S	-1106	-850	Spot

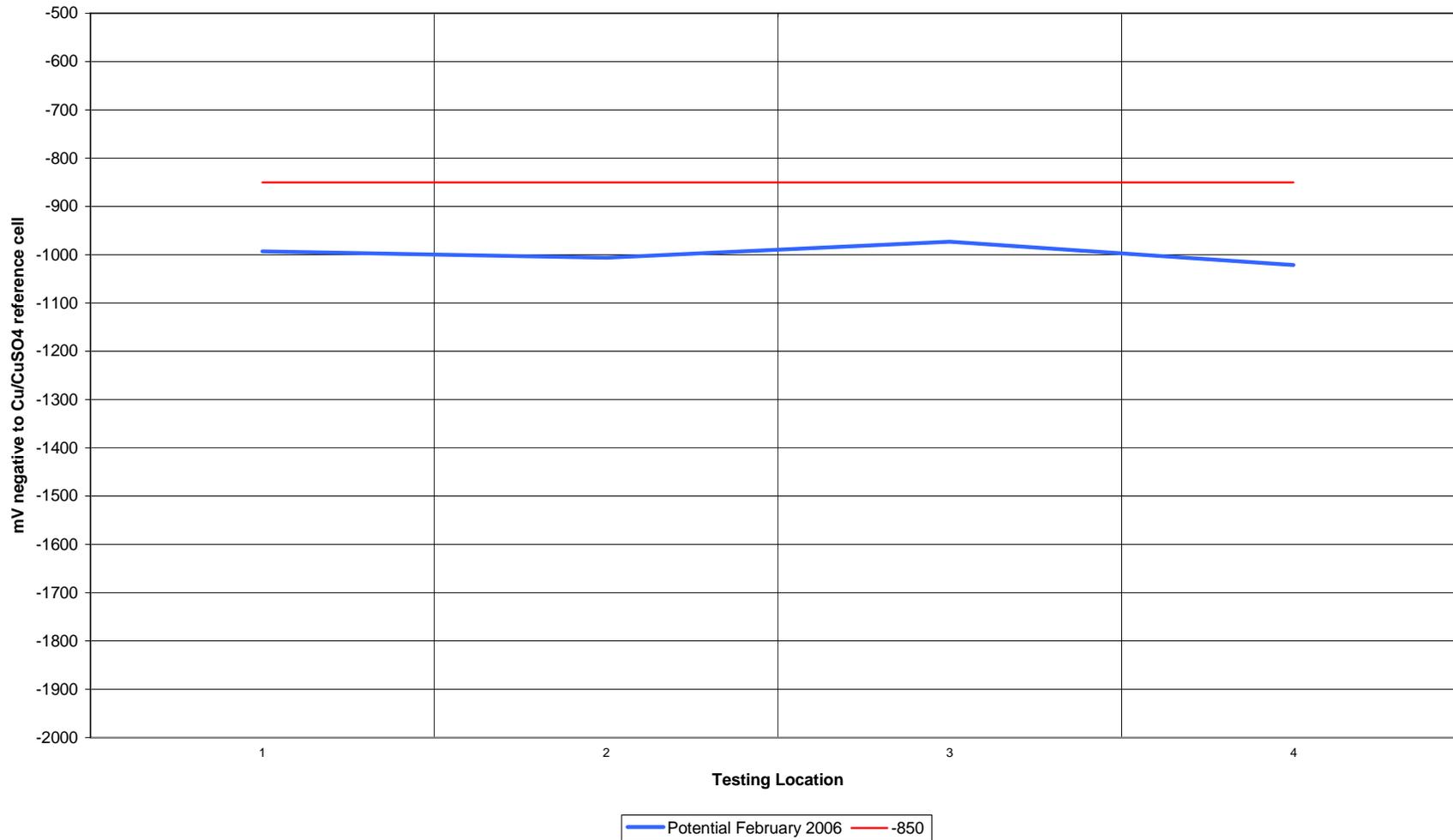
Potential Summary and Graph for Tooravale & Visy Lateral February 2006



Potential Summary for National Dairies Lateral February 2006

Date	Test Point Number	Location	Potential February 2006		Measurement Type
			On Potential	Under Value	
February-06	1	Murray Bridge M/S Outlet (D/S)	-993	-850	Spot
February-06	2	Zn earthing	-1006	-850	Spot
February-06	3	Zn earthing	-973	-850	Spot
February-06	4	National Dairies M/S Inlet (U/S)	-1021	-850	Spot

Potential Summary and Graph for National Dairies Lateral February 2006



ANNEX B : ASSESSMENT OF DECLARED OBJECTIVES

2006 PL6 ANNUAL REPORT

DATED MARCH 2007

ASSESSMENT OF DECLARED OBJECTIVES

Riverland Objectives and Assessment Criteria¹

OBJECTIVE	GOALS	COMPLIANCE CRITERIA	ACHIEVED?	COMMENT
<p>1. Vegetation - to promote and maintain vegetation in accordance with surroundings.</p>	<p>To encourage regrowth of native grasses and shrubs along the right-of-way, (i.e. - not in farmland used for cropping or pasture).</p>	<p>Native vegetation regrowth (grasses, shrubs & trees) along easement is typical of adjoining areas.</p>	<p>Achieved</p>	<p>Note:An area near Sedan has wombat burrows on the easement and a potential to cause pipe coating damage. This area continues to be regularly monitored.</p>
	<p>To ensure environmental weeds and pathogens along the right-of-way are managed in a manner consistent with adjoining land.</p>	<p>No new weed infestations as a result of pipeline operations. Minimal spread of weeds along the pipeline easement.</p>	<p>Achieved</p>	
	<p>To manage vegetation regrowth along the right-of-way, so as not to restrict access (our access not third party access) or to incur damage to the pipeline infrastructure.</p>	<p>Vegetation trimmed rather than cleared where possible.</p>	<p>Achieved</p>	
	<p>To monitor and manage Branched Broomrape (<i>Orobanche ramosa</i>) within defined containment area along Murray Bridge lateral pipeline.</p>	<p>No identified spread along pipeline easement as a result of operations & maintenance activities. No landholder complaints or non-compliances with Code of Control for Broomrape in the course of pipeline operations.</p>	<p>Achieved</p>	
	<p>To ensure that pipeline operations do not impinge upon existing native fauna habitats.</p>	<p>Native fauna habitats along easement are typical of adjoining areas.</p>	<p>Achieved</p>	

¹ Assessment criteria have been developed to be “black and white”. Professional judgement is required to assess whether non-compliance is minor or major. It is necessary to ensure that adequate information is available to enable this judgement to be made.

OBJECTIVE	GOALS	COMPLIANCE CRITERIA	ACHIEVED?	COMMENT
2. Soil - to conserve the original state of the soil.	<p>To minimise the likelihood of erosion or subsidence occurring along the right-of-way.</p> <p>To manage soil rehabilitation areas in an appropriate manner.</p>	<p>Soil erosion and/or subsidence is better, or at least consistent with the surrounding area.</p> <p>Rehabilitation areas support regrowth consistent with the surrounding area.</p>	<p>Achieved</p> <p>Achieved</p>	<p>Soil level and/or subsidence are consistent with the surrounding area.</p> <p>Rehabilitation areas support re-growth consistent with the surrounding area.</p>
3. To promote and maintain water drainage patterns where it is not detrimental to the pipeline.	<p>To ensure that operation and maintenance activities do not give rise to pollution of watercourses</p> <p>To ensure that there is no evidence of altered drainage patterns, unless required to protect the pipeline from wash away</p>	<p>Solid & liquid wastes have not polluted rivers, streams, watercourses, dams or lakes.</p> <p>Bank stability maintained, especially following high rainfall events.</p> <p>Likely alteration to drainage patterns not evidenced by soil erosion or subsidence.</p>	<p>Achieved</p> <p>Achieved</p>	<p>OEAM activities have not resulted in pollution to natural watercourses.</p> <p>No alteration to drainage patterns have been observed.</p>
4. To minimise uncontrolled atmospheric emissions.	<p>To limit uncontrolled emissions to atmosphere.</p> <p>To minimise dust generation.</p>	<p>No unintentional gas emissions reported.</p> <p>No complaints from third parties in respect of air quality.</p> <p>Compliance with Legislative requirements of <i>Environment Protection Act 1993</i> in respect of gaseous and dust emissions.</p>	<p>Achieved</p> <p>Achieved</p>	<p>There have been no material unintentional gas emissions. A minor leak from a Closure flange at MLV5 was repaired.</p>
5. Land Use - to avoid significant disturbance to land use or damage to infrastructure.	<p>To minimise disturbance to land use and damage to infrastructure.</p>	<p>No complaints from landholders in relation to land use modification or infrastructure damage.</p>	<p>Achieved</p>	<p>No complaints received from landowners.</p>

OBJECTIVE	GOALS	COMPLIANCE CRITERIA	ACHIEVED?	COMMENT
	To inform landholders of likely land use disturbance as a direct result of operations.	Records show that landholders are appropriately consulted regarding pipeline activities which may affect their particular property.	Achieved	
6. Public Safety - to minimise risks to public and third party health and safety.	<p>To ensure that adequate measures are in place to protect public and third party safety during operations and maintenance activities.</p> <p>To prevent third party access on the pipeline easement.</p> <p>To adequately protect the public during routine maintenance operations.</p> <p>To avoid fires during routine operations.</p>	<p>No occupational health, safety and welfare incident or accidents involving third parties.</p> <p>No un-authorized activity on the pipeline easement</p> <p>Documented evidence of public safety management and pipeline awareness, in the course of pipeline operations.</p> <p>Adherence to AS2885 demonstrated via annual reports, emergency response reports and fitness for purpose reports (refer to <i>Petroleum Act 2000</i>).</p> <p>No fire outbreaks arising from pipeline operations.</p>	<p>Achieved</p> <p>Not Achieved</p> <p>Achieved</p> <p>Achieved</p>	<p>There was an encroachment on the pipeline easement in the property of Mr Stephen Edwards of Swan Reach as reported 4/1/07</p> <p>No issues occurred during routine maintenance</p> <p>No fire outbreaks arising from pipeline operations.</p>
7. To minimise noise due to operations.	To ensure that operations comply with noise standards and where possible ensure landowners are not disturbed.	<p>No noise related complaints from landholders or third parties.</p> <p>Compliance with Legislative requirements of <i>Environment Protection Act 1993</i> in respect of noise emissions.</p>	Achieved	No noise related complaints from landholders or third parties received.

OBJECTIVE	GOALS	COMPLIANCE CRITERIA	ACHIEVED?	COMMENT
8. To manage all operational wastes in an appropriate manner.	To ensure that all wastes are removed from the site and, reused, recycled or appropriately disposed of.	No wastes evident on or off the easement arising from pipeline operations. Documented waste disposal records to confirm appropriate disposal.	Achieved	Normal operational waste returned to the operations depot and dealt with accordingly.
9. To appropriately manage cultural heritage sites during pipeline operations and maintenance activities.	To manage Aboriginal and European heritage sites in accordance with prescribed procedures.	Management of identified heritage sites in consultation with traditional custodians. Compliance with work instructions in relation to heritage site management. Compliance with Legislative requirements of <i>Aboriginal Heritage Act 1988</i> and <i>Heritage Act 1993</i> in respect of previously identified and potentially 'new' sites along the pipeline easement.	Achieved	No impacts to known heritage sites.
10. To minimize the risk of loss of supply to consumers.	To minimise the potential for significant disruption of gas supply to customers where possible.	No interruption to supply.	Achieved	No interruption to supply in the Riverland region during the reporting period.