

PRELIMINARY ASSESSMENT OF REEDY'S ORCHARD KELSO NEW SOUTH WALES FOR CONTAMINATION APRIL 2005 CENTRAL WEST ENVIROTECH LABORATORY REPORT

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1. SUMMARY

A preliminary soil contamination study was conducted at "Reedy's Orchard", Sydney Road, Kelso, New South Wales, on 31st March 2005. The site was a former Peach (*Prunus*) orchard for approximately 20 years until about 1985 when the trees were removed and the land was returned to pasture

The study was initiated at the request of Gary Sloan, to obtain a preliminary estimation of contamination prior to potential re-development of the site for commercial bulky goods and rail transit hub. A preliminary site visit conducted in March 2005 indicated that the site was, and had previously been agricultural land. Hence potential contamination was most likely to derive from orchard activities.

Thirty two soil pits were excavated to a depth of approximately 0.5 m. Twenty four soil samples were analysed for physicochemical properties such as pH, EC and texture to characterize resident soil types.

Eight composite topsoil samples were analysed for pesticides and heavy metals to determine the impact of agrichemical use from the establishment of the orchard in about 1965 to the present day.

Analytical results were compared with appropriate Australian Human Health-Based soil Investigation Level (HHBIL) 'A'- guidelines for residential areas.

None of the composite samples was found to contain organochlorine insecticides including derivatives of DDT and endosulfan above respective HHBILs. No composite was found to contain heavy metals typically associated with orchards above respective guidelines.

The results are consistent with the short (20 year) lifespan of the orchard and the low application schedule of pesticides applied. Soil pits encountered no introduced fill. Nor was any hydrocarbon or other chemical inventory exposed during the study. Soil type was typical for Raglan and Bathurst soil scapes. The data indicate a low risk of contamination

Table 1 Summary of Analytical Results

8		mg/kg											
Samples				Copper	Lead	Zinc	Arsenic	Mercury					
HHBIL	10	na	200	1000	300	7000	100	20	15				
Mean	Mean <0.1 <0.0		<1.2	67	10	13	1.1	0.1	<0.05				
PMC	3.6	<2	6.6	396	48	72	8	8.0	0.2				
Uncert.	V.Low	V.Low	V.Low	V.Low	V. Low	V. Low	V. Low	V. Low	V. Low				

HHBIL = Human Health-Based Investigation A Level for Residential with Garden/Accessible Soil (Imray and Langley 1996)
PMC = Potential Maximum Concentration — One sub-sample in four having contaminant concentration above baseline levels
Uncert. = Likelihood of an undisclosed hotspot with contaminant above the A-'residential/garden' threshold.

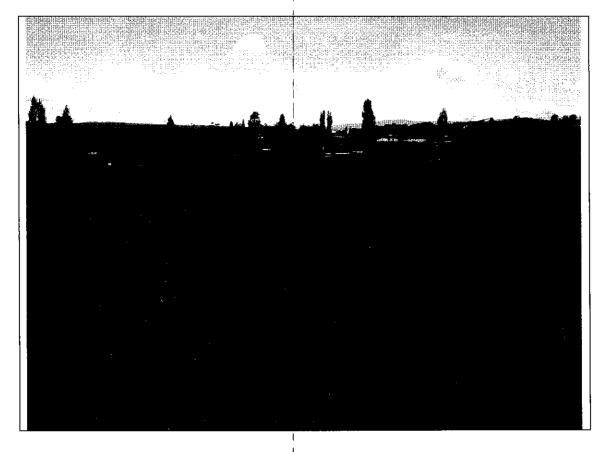
2. <u>INTRODUCTION</u>

A preliminary 'orchard' soil contamination study of the 9.55 ha former peach orchard, Sydney Road Kelso, formerly owned by Anthony Reedy senior, was conducted in on 31st March 2005, to estimate the distribution and magnitude of contamination, potentially deriving from two decades of stone fruit cool season orchard use. The excavation of soil pits would also identify inconsistencies in soil type that may be related to alternative past landuses.

Approximately 3 test pits per hectare of ex-orchard land were excavated to reveal soil characteristics and quantify soil characteristics. Analysis of topsoil for pesticides and heavy metals typically associated with orchard production revealed an absence of significant residues.

None soil pit was associated with foreign fill or undisclosed ordinance. The results of soil characterization and analysis indicate that landuse has been agricultural, with topsoil disturbance typically associated with cultivation, but no other evidence of significant excavation or burial. A possible exception is the 0.2 ha former quarry at the entrance to Sydney Road, which was excavated before 1960, and which has no obvious batter comprising introduced fill. Eight composite samples were prepared from 32 topsoil samples and analysed for pesticides and metals. No residues were detected.

Figure 1 Former Reedy's Orchard View North East to Sydney Road



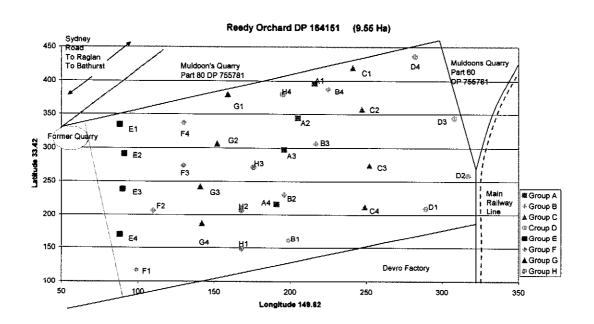
3. BACKGROUND

The study was initiated by Gary Sloane, to estimate contamination potentially deriving from past landuse. The site would be considered for commercial development as a bulky goods terminal. A preliminary site visit confirmed that past land use included a stone fruit orchard. Site history details indicated that landuse prior to 1960 was agrarian. A small excavated area at the north east corner adjoining the Sydney Road indicated some quarrying had taken place prior to Mr. Reedy's occupation. The size of the quarry and topography indicated that excavation was not associated with stockpiled or imported fill.

3.1 Location

A single preliminary contaminated site assessment was conducted on the former Reedy Orchard (9.55 ha), D.P. 164151, County of Roxburgh, Shire and Municipality of Bathurst. The site can be located at 743700 E and 6298700 N on the Bathurst 8831-3-S 1:25,000 topographical map. The street address of the Orchard is Sydney Road, Kelso, New South Wales.

Figure 1 Sampling Points in D. P. 164151 – Reedy's Orchard



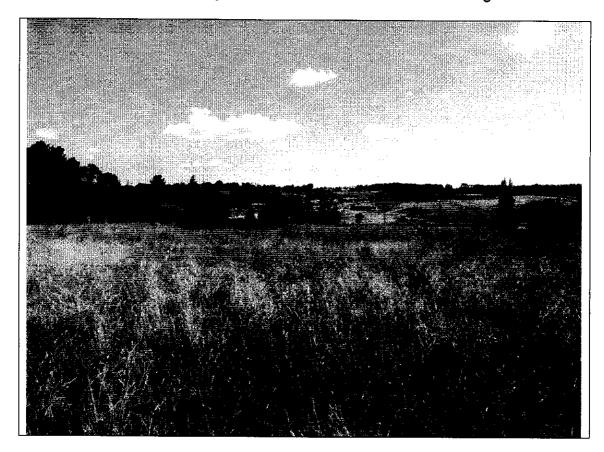
3.2 Site Description

At the time of conduct of the study, the land of DP 164151 was vacant agrarian land, predominantly vegetated with introduced perennial grasses and broad leaf weeds. Four remnant fruit trees were located centrally at G3 and H2 (see Map).

A retail fruit outlet and storage shed occupied the Sydney Road Frontage at the north west corner of the site. Three residential blocks also abutting with Sydney Road were situated on the north east side of the site adjacent to a small former quarry, which occupied the north east corner of the site.

The site was situated on relatively even sloping land (<5%) with a slight central rise to 700 m and less than 10 fall throughout the orchard.

Figure 2 Former Reedy's Orchard View North West to Packing Shed



3.3 Site History

The orchard was planted by Anthony Reedy (sr.) in about 1965. According to Mr. Reedy, it comprised approximately 1 hectare of apple (*Pome*) trees, predominantly the Jonathon variety, located at the north end of the orchard in the vicinity of test pits E1-E4 and F1-F4. A further 6 hectares was dedicated to peach (*Prunus*), approximately 2700 trees, south of the apple grove.

The orchard was removed in about 1985. The trees were uprooted, piled and burned and the land cultivated to pasture, which was stocked with cattle periodically. Currently, only four fruit trees, in the vicinity of G3 and H2, remain.

Mr Reedy, may have applied a standard regime of agrichemicals to the orchard in accordance with NSW Agriculture horticultural guidelines. The program comprised COICIDE® (copper-based) and winter oil sprays in May and August and ZIRAM® applications at 7 day intervals during August. Occasional insecticide (MAVRICK® and CONFIDOR®) applications were generally made in October for aphid control. Spot spraying with Chlorpyrifos for control of San Jose Scale and earwigs was occasionally carried out around November, and depending on pest pressure, one to two weeks of fungicide (TILT®, ROVRAL®) applications were made during the summer months—December to February.

The above pesticide schedule might be expected to yield trace amounts of copper, manganese and zinc. Spot spraying with chlorpyrifos might be expected to yield traces of this moderately persistent chlorinated organophosphate insecticide in prunings and ground in stumps, if conducted intensively over a decade or more. One might expect negligible to low organochlorine insecticide contamination, since use of OCs including DDT continued until the early 1990s. Other insecticides such as Lindane were discontinued in the 1980s. Endosulfan, a more recently developed chlorinated insecticide, is unlikely to be present in greater concentration than DDTs. Inorganic pesticides such as lead arsenate and to a lesser extent, mercuric chloride, were still in use during the 1960s. Residues of arsenic, lead and mercury might be expected, but less so than an orchard dating from the 1920s and 1930s.

Figure 3 Former Reedy Orchard View East over Muldoon Allotment



A small quarry was excavated at the north east corner of the site prior to Mr. Reedy's ownership. He can recall no evidence of usage of the small quarry in the past four decades. Prior to establishment of the orchard, the landuse was agricultural (grazing).

3.4 Geology and Hydrology

Parent geology derives from the Bathurst Batholith which is described as coarse grained porphyritic biotite granite. Quartz content is approximately 20% which is consistent with the abundance of coarse grained sand in topsoil and clay at the interface with decomposed granite, which was encountered throughout the site at shallow depths of 0.1-0.7 m.

The site has characteristics of both the Bathurst and Raglan soilscapes, which are part of the Bathurst Batholith. In these soilscapes granodiorite frequently overlays biotite granite. The dominant soil types for Bathurst and Raglan soilscapes are non calcic brown and red solodic, with yellow solodic soils in drainage depressions. Table 2 summarizes the geology and soil types of the Kelso locality:

Table 2 Geology and Soil Types of the Bathurst Region

Map	Bathurst 1:100 000 series
Geological Unit	Bathurst Granite
Parent Rock	Medium to coarse grained and massive granodiorites and adamellites
Parent material	Alluvial-colluvial deriving from above parent rock
Formation	Bathurst batholith (Cbg) coarse grained porphrytic biotite granite with orthoclase
	megacysts and homblend biotite granadiorite
Adj. formation	(Qa) alluvium gravel, sand silt clay
Dominant Soil	Topsoil: A1 Reddish or Dark Brown Sandy Loam, pH 6.0
Red Solodic	Subsoil: A2 Bleached Sandy Loam pH 6.5
	Subsoil: B1 Reddish Brown Light to Heavy Clay pH 6.5
	Subsoil: B2 Yellowish brown Heavy clay pH 8.3
Common Soil	Topsoil: A1 Dark Brown Sandy Loam pH 6.0
Non Calcic	Topsoil: A2 Reddish Brown Medium Clay pH 6.5
Brown	Subsoil: Dull Yellowish Brown Heavy Clay pH 6.5
Common Soil	Topsoil: A1 Brown to Brown Black Loamy Sand to sandy loam pH 5.7
Yellow Solodic	Topsoil: A2 Bleached Yellow Brown to light grey sandy loam pH 7.0
	Subsoil: Dull Yellow Brown mottled sandy clay loam to heavy clay pH 8.0-8.5.

Soil samples collected on site were generally dark brown loamy sand to sandy loams or clayey sand. A2 horizon was generally bleached dull brown sandy clay loam to clay loam. Subsoil was usually reddish brown or brown heavy clay to sandy clay. The soils encountered were most like a red solodic.

The site lies 2.5 km east of the Macquarie River, about 200 m west of, and 100 m south of seasonal tributaries of Raglan Creek which continue west to join the Macquarie River at about 20 m lower altitude (670 m), relative to the Orchard.

Figure 4 Profile of a Red Solodic Soil from mid slope Former Reedy Orchard

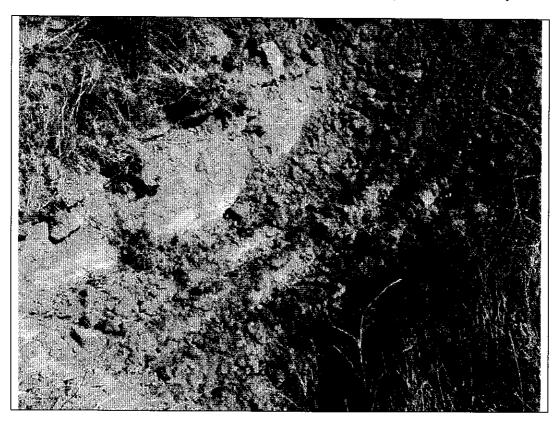
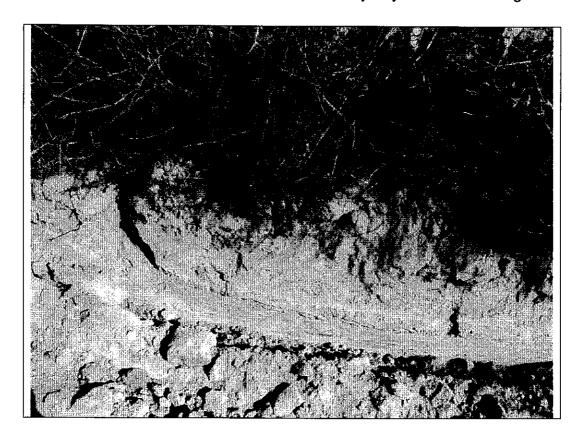


Figure 5 Profile of Yellow Solodic with heavy clay over weathered granite



4. METHODS

4.1 Location and Number of Samples

Eight composite topsoil (0-0.15 m) and eight composite subsoil (0.15-0.30 m) samples were collected from 32 test pits. The topsoil composites were analysed for pesticides and heavy metals. The soil samples were taken in a loose grid formation. The location of each of the test pits is shown in Figure 1, and the composite sample locations (1:25 000 topographic map) summarized in Table 3.

Table 3 Location of sampling areas

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Α	Former Peach Orchard Central	191 - 216	216 - 396
В	Former Peach Orchard Central South	196 - 225	161 - 387
С	Former Peach Orchard South	241 - 252	212 - 419
D	Former Peach Orchard Far South	282 - 317	209 - 436
E	Former Apple Grove North East	088 - 091	170 - 334
F	Former Apple Grove North	99 - 130	117 - 337
G	Former Peach Orchard North	142 – 159	187 - 379
H	Former Peach Orchard North west	168 - 195	149 - 379

4.2 Excavation of Test Pits

Soil Pits were excavated using a 32 tonne CATERPILLAR® excavator with 1.3 m wide bucket.

4.3 Sample Screening and Collection

Soil samples were collected from test pit side walls at prescribed depths, using a Jarrat-Dormer 75 mm hand auger. Humus was removed from the adherent soil by gentle shaking. Individual soil samples were collected in polythene bags for air-drying and physicochemical characterization. Composite samples were formed by combining equal volumes of soil from the same depth interval at 4 separate test pits. The composite samples were stored in Teflon lined 250 ml glass jars in the freezer at -20°C until dispatched for analysis. The location, soil texture and colour of topsoil and subsoil samples from each of the constituent sub-sampling points was recorded during excavation.

4.4 Decontamination

The auger head, trowel and stainless steel bowls were cleaned between collection of each sub sample, primarily by scraping and brushing adherent soil from the auger head, and secondarily by rinsing with tap water, where required. The full decontamination procedure was invoked when moist soil adhered to the auger. This comprised 4 steps:

- 1. Brushing away excess dirt with a stiff brush
- 2. Washing with 2% v/v liquid organic detergent
- 3. Sequential rinsing with municipal tap water (two rinses)
- 4. Air-drying before commencement of subsequent sampling

4.5 Dispatch

The soil samples stored in glass jars with Teflon lined lids, were wrapped in insulation and transported to an accredited analytical laboratory with sufficient coolant to maintain a <4°C temperature for the duration of transit (24 hours). The dispatched samples were accompanied by appropriate chain of custody documentation. The remaining jar samples were frozen until completion of the analyses for follow-up purposes.

4.6 Analysis

The composite topsoil samples in glass jars were dispatched for external analysis of organochlorine pesticides.

A 1:5 soil: distilled water mixture of air dried samples was prepared and analysed for electrical conductivity (EC $_{1:5}$) and pH $_{\rm H2O}$ using a TPS 90-FLMV electrochemical meter. The K10 electrical conductivity probe was calibrated against a 276 mS/cm standard. The lonode IJ44 intermediate junction pH electrode was standardized against pH 6.88 phosphate and pH 4.0 phthalate standards.

The soil samples dispatched for external testing were analysed for organochlorine pesticides, organophosphate insecticides and eight metals including arsenic (As), copper (Cu), lead (Pb), Cadmium (Cd), Chromium (Cr), nickel (Ni) and zinc (Zn) and mercury (Hg) by LabMark laboratories Asquith, New South Wales.

Organochlorine insecticides were quantified using electron-capture detection - gas-liquid chromatography mass spectrometry (ECD-GCMS). Organophosphate insecticide concentrations were determined using flame thermionic detection and GCMS. Metals were determined after acid digest by inductively coupled plasma absorption/emission spectrometry (ICPAES) and inductively coupled plasma mass spectrometry (ICP-MS). Certificate of Analysis Sheets for Organochlorines and Metals are shown in Appendix 7.1.

4.7 Reporting

The results of analyses were assessed in relation to Commonwealth Environment Protection Agency and Department of Health and Family Sevices contaminated site guideline criteria.

5. RESULTS AND DISCUSSION

5.1 Field Data

Soil samples were visually and olfactorily assessed during test pit excavation. The full data recorded during sampling is shown in Appendix 7.2 and summarised in Table 4 below:

Table 4 Field Texture and Colour

	Participation of the second se		a a a a a a a a a a a a a a a a a a a	
Sandy Loam or	Brown/Dark Brown	20 (63%)	1 (3%)	
Fine Sandy Loam	Grey/Yellow Brown	2 (6 %)	1 (3%)	
Sandy Clay Loam or	Dark Brown/Brown	8 (25%)	16 (50%)	100 10 10 16
Fine Sandy Clay Loam	Dark Greyish Brown	1 (3%)		
Clay Loam	Yellow Brown	1 (3%)		Ì
	Brown		10 (31%)	
Sandy Clay or SCL	Red			2 (12%)
	Brown			4 (24%)
Heavy Clay	Dark Brown or Orange		2 (6%)	3 (18%)
	Red or Red Brown		2 (6%)	9 (52%)

From Table 4, it is evident that topsoil was generally dark brown sandy loam or a brown sandy clay loam. Topsoil A2 horizon, was generally bleached brown sandy clay loam or brown clay loam. Subsoil was generally red to reddish brown heavy clay, sometime brown or orange, sometimes sandy clay.

5.2 Laboratory Data

5.2.1 Electrical conductivity and pH

A total of twenty four individual soil samples were tested for physicochemical properties by C W Envirotech Orange N.S.W. The data for texture, colour, EC_{1:5}, texture-dependent electrical conductivity (ECe) and pH (water) of the 24 samples is shown in Appendix 7.2 The data are summarized in Table 5.

Table 5 Soil Electrical Conductivity and pH

Level	Depth (m)	Median Texture	Median Colour	EC, • (uS/cm)	ECe ● dS/m	pH water
Topsoil	0 - 0.3	Loamy Sand	Dark Brown	40 ± 20	1.0 ± 0.6	6.1 ± 0.3
A2 horizon	0 - 0.3	Sandy Clay Loam	Brown	27 ± 13	0.3 ± 0.1	6.1 ± 0.3
Subsoil	0 – 0.5	Medium Clay	Reddish Brown	30 ± 6	0.2 ± 0.1	6.5 ± 0.3
Subsoil outlier	0 – 0.5	Heavy Clay	Yellowish Brown & Dark Grey Mottle	142	0.8	8.2

[●] EC_{1:5}= Electrical conductivity of a 1:5 soil: distilled water extract

[●] ECe = Electrical conductivity equivalent to the electrical conductivity of the saturation extract – determined as the product of the appropriate soil texture factor and EC_{1.5}.

Outlier has an ECe and a pH which is 2 standard deviations above the mean

From Table 5, it is evident that the orchard soil was generally a dark brown loamy sand of pH 6.1. The A2 topsoil was generally bleached brown sandy clay loam of pH 6.1; and subsoil was usually a reddish brown heavy clay of pH 6.5.

The laboratory data confirm that the resident soil was typically red solodic and occasionally yellow solodic. The higher salinity and pH associated with samples such as subsoil from test pit F4 are in this instance still consistent with soil type.

No soil was encountered that was atypical for the Bathurst-Ragan region. Appendix 7.2 lists the field pH and EC data for the 24 individual soil samples tested.

5.2.2 Organochlorine Pesticides

Topsoil samples were analysed for a suite of organochlorine pesticides (refer Table 6), several of which have been included in traditional pesticide spray regimes from the early 1940s to early 1990s. The only organochlorine-type insecticide/acaricide commonly used in Australian that is still registered for use in orchards is endosulfan.

Table 6 Organochlorine Pesticides

Organochlorine Pesticide	A	В	C	D	i in E	F	G	H	Composite Threshold	HHBIL Threshold
α , β , γ and δ -BHC,HCB	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	2.5	10
Heptachlor, Heptachlor epoxide, Methoxychlor,	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	12.5	50
cis- and trans Chlordane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	2.5	10
Aldrin, Dieldrin, Endrin, Endrin ketone/aldehyde	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	2.5	10
Endosulfan (I, II and sulphate)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	2.5	10
4,4-DDD, 4,4-DDE, 4,4-DDT	1.39	0.93	1.64	1.3	1.45	1.12	1.17	1.19	50	200

Threshold = Human Health-Based Investigation A Levels (HHBIL) - Standard Residential with garden/accessible soil (Imray and Langley 1996)

From Table 6, it is evident that none of the 32 test pits yielded topsoil (0-0.3 m) with residues of organochlorine pesticides other than DDTs, in any of the 32 test pits excavated on the Reedy Orchard. DDT and DDT analogues were present at very low concentration (1-2 mg/kg) in all eight composite samples, which is strongly indicative of the past landuse as an orchard.

None of the organochlorine –type pesticides were detected in any composite sample above the limits of analysis of 0.05 mg/kg, which means that the residues were absent or at most one-two hundredth of the lowest Human Health-Based Investigation Level (HHBIL) threshold.

The organophosphate pesticide (OP) analysis included 10 compounds that might be used on orchard insect pests. Only two could by regarded as mildly persistent

by virtue of chlorine moieties. Diazinon is more often associated with sheep husbandry.

Table 7 Organophosphate Pesticides

Organophosphate Insecticides	Α	В	C	D	E	F	G	HP
Diazinon	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dimethoate	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion, Methyl Parathion	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Malathion, Fenitrothion	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ronnel, Chlorpyrifos	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos-methyl	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton and others (10)	<1	<1	<1	<1	<1	<1	<1	<1

Table 7 shows that no OP residues were detected in any composite soil sample. The vast majority of OPs are not persistent in the soil environment, by virtue of hydrolytic breakdown. It is not surprising that no residues of any of the twenty OPs analysed were found in any of the composite samples.

The eight composite samples were also analysed for eight heavy metals that might derive from inorganic orchard treatments such as Bordeaux mixture:

Table 8 Metals

Metals	A	114B	C	D	E	F	G	H	Composite Threshold	HHBIL Threshold
Arsenic	1	<1	<1	2	<1	<1	<1	<1	25	100
Cadmium	<0.1	<0.1	0.2	0.1	0.1	0.1	0.1	<0.1	5	20
Chromium	13	7	8	11	16	16	7	6	25 - 3000	100 - 120000
Copper	88	66	99	88	49	55	46	43	250	1000
Lead	10	9	10	12	9	8	10	7	75	300
Mercury	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	4	15
Nickel	3	2	3	3	6	4	5	2	150	600
Zinc	13	10	15	15	10	11	18	9	1750	7000

Threshold = Human Health-Based Investigation A Levels (HHBIL) - Standard Residential with garden/accessible soil (Imray and Langley 1996). Light Shading indicates contamination which is above background levels, but less than the HHBIL.

From Table 8, it is evident that none of the composite soil samples had concentrations of the key heavy metals above respective Human Health-Based Investigation Thresholds.

Arsenic and Lead levels were very low at background concentrations, supporting the premise that the orchard was in existence during the mid 1960s to mid 1980s, since use of lead arsenate was significant in the first half of the twentieth century, and traces of these metals for older orchards are frequently an order of magnitude higher than encountered

6. <u>CONCLUSION</u>

Assessment of the Reedy Orchard (DP 164151) Sydney Road Kelso, New South Wales for contamination potentially deriving from orchard landuse revealed:

- Negligible contamination deriving from organochlorine pesticides
- Negligible contamination deriving from organophosphate pesticides
- very low levels of heavy metals typically associated with orchard production.

No pesticides or heavy metals were encountered above respective HHBILs.

Soil types and profiles were consistent with red solodic and non-calcic brown soils that derive from the Bathurst and Raglan soilscapes, both of which are underlain at shallow depth by weathered granodiorite and decomposed granite.

Weathered granitic material was encountered at shallow depth (0.1 - 0.7 m) throughout the site. No introduced soil or fill or buried inventory such as asbestos or hydrocarbons was encountered in this investigation

Further work might include closer inspection of the Sydney Road frontage, specifically the small quarry and land immediately east of the retail fruit outlet/storage. Preliminary site visits did not identify features that might implicate these areas as sources of significant contamination. The chemical storage and mixing area is normally the most likely site of a "hotspot". At the time of this investigation, the water filling point was located at the packing/ retail shed, and it is likely that mixing took place at the north west corner of the site.

The short duration (20 years) of orchard establishment and absence of preexisting orchard or similar landuse, mitigates against significant long term spillage. Should future landuse of a residential or similarly sensitive nature be proposed in proximity or on the site of the current storage shed, composite sampling of the substrate around the packing shed and east to the residential allotments may be conducted for analysis of appropriate pesticides and heavy metals.

The second sub-site that may require further validation if a sensitive landuse is proposed is the small former quarry at the north east comer of the site. No evidence of imported fill or spillage of hazardous substances was observed during site inspection, apart from the transient storage of building materials that may have contained asbestos. This is no longer the case. The quarry floor and perimeter of the shed might be sampled and tested should preliminary excavations show any introduced fill stained soil or abnormal discontinuities in the soil profile. There is anecdotal evidence that the site was a gravel source predating the former Kelso Gravel Quarry which was located further south.





CUSTOMER CENTRIC - ANALYTICAL CHEMISTS

EDVALO FRANCRIA DE ANALASAS. ANA OROMANTAL DIMENSION Laboratory Report No: E022211 Laboratory Report No Client Name: Client Reference: Contact Name: Chain of Custody No: Sample Matrix: Central West Envirotech 0507DR - May assorted James Milson Date Received: 15/06/2005 Date Reported: 21/06/2005 OTHER & SOIL & WATER

Sample transace.

This Trial Certificate of Analysis a remists of sample results, DQSs, method descriptions, I accordation and and nament. The DQO compliance relates specifically to QAQC compliance and and analysis of the control o initions, and internationally recognised NATA rd as part of the sample analysis, and may provide as occur once full & final payment has been satisfied and most period.

QUALITY AS	SURANCE CRITERIA				QUALITY O		CRITERIA (GAC) (1)
Acturacy:	matrix spike: les, trm, method: surrogate spike;	I in first 5-20, then I I per analytical batch addition per target or	ĺ			apike, les, erm	general enalyses 1996 130% recover phenol shatybas 10% - 130% recovery preparation phenolicide analyses
Precision:	laboratory duplicate:	l in finst 5-(0) (Line)	every	le surigina	dania.	sinisça Jill 40 lit	1076 - 13076 recovery phenoxy acid berbicides 3076 - 13076 recovery
	laboratory implicate:	PPD values properly	व्यं कोस स्वयं	s deplosts se criteria		apport/ention ha	+/- 5% (>3 ineq*])
Bolding Time	s: suits, Welers	Refer to Lebklerk Protections 1000s 14 days water	17.7	a read		duplicate lab RPD (motals):	not detected >95% of the reported EQL 0-30% (>10xEQL), 0-75% (5-10xEQL 0-100% (<5xEQL)
		VAC's 7 days water of VAC's 14 days soil SVOC's 7 days water	r (4 da 14 da	ya acidified is soil		duplicate les RPD	0-50% (>10xBQL), 0-75% (5-10xEQL 0-100% (<5xBQL)
4	in Christopolika an istopistarika	Posticidos 7 days was Mistals 6 storeths gave Marcury 28 days	r, 14 e ral ata	aya ioil santa		CONTROL SPECIFIC AC	CEPTANCE CRITERIA (ASAC)
Confirmation		OCMS, of positional	er/ ool	emn	Accuracy:	spike, les, cen surrogate	stalyte specific recovery data <3xxd of historical mean
Sensitivity:	likoru.	Typically 2-5 x Math (MDL)	d Des	ction Limit	i incertaint	y: upike, ku:	monurement calculated from historical analyte specific control charts
RESULT AN	NOTATION						200
	IXQi: Data Quali	ty Objective ty Indicator Quantitation Limit ble	s; d; t;	matrix spike laboratory de laboratory tr RPD relative	uplicate	p: lea: erm: mb:	pending Isboratory control sample cartified reference material mathed black

Authorising Chemist (NATA signatory) ivan.povolny@labmark.com.au

This document is issued in accordance with NATA's accorditation a

Laboratory Report: E022211 Cover Page 2 of 4

STPC GUIDLEIST COMPLIANCE GENERAL

- Results relate specifically to samples as received. Sample results are not corrected for matrix spike, les, or surrogate recovery data.

 EQU's are matrix dependant and may be increased due to sample dilution or matrix interference.
- Laboratory QA/QC samples are specific to this project.
- Inter-laboratory proficiency results are available upon request. NATA accreditation details available a www.nda.um.uu D.
- VOC spikes & surrogates added to samples during extraction. SVOC spikes & surrogates added prior to
- Recovery data outside GAC limits shall be investigated and compared to ASAC (historical mean +/- 3sd). If recovery data <0%, then the relevant results for that compound are considered not reliable.
- Recovery data (ms, surrogate, crm, les) outwide ASAC limits shall initiate an investigative action. Anomolous QC data is examined in conjunction with other QC sumples and a final decision whether to occept or reject results in provided by the professional judgement of the senior analyst. The USEPA-CLP National Functional fulfilleties are reterred in far apposite recommendations. G.
- 14. Extraction (preparation) date refers to the date that sample preparation was initiated. Note that certain methods not requiring sample preparation (eg. VOCs in water, etc) may report a common extraction and analysis date.
- LabMark shall maintain an official copy of this Certificate of Analysis for all tracable reference purposes.

CHAIN OF CUSTODY (COC) & SAMPLE RECEIPT NOTICE (SRN) REQUIREMENTS

- SRN issued to client upon sample receipt & login verification.
- Preservation & sampling date details specified on COC and SRN, unless noted
- C. Sample Integrity & Validated Time of Sample Receipt (VTSR) Holding Times verified (preservation may extend holding time, refer to preservation chart).

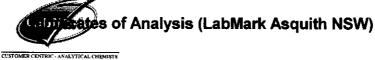
NATA ACCREDITED METHODS

- NATA accreditation held for each method and sample matrix type reported, unless noted below
- NATA accredited in-house laboratory methods are referenced from NEPC. ASTM, modified USEPA / APHA documents. Corporate Accreditation No. 13542.
- C Subcontracted analyses: Refer to Sample Receipt Notice and additional DOC comments.

This document is issued in accordance with NATA's accreditation require

APPENDICES

7.1





CUSTOMER CENTRIC - ANALYTICAL CHEMISTS

Laboratory Report: E022211 Cover Page 3 of 4

QA/QC FREQUENCY COMPLIANCE TABLE SPECIFIC TO THIS REPORT

Page:	Method:	Totals:	#d	%d-ratio	#1	#s	%s-ratio
7	Acid extractable metals (M7)	12	2	17%	0	$\overline{}$	896
10	Acid extractable mercury	12	2	17%	0	i	8%
17	Acid extractable metals	ī	0	U%	Ü	ė	096
18	Moisture	12	-		-	-	-
Matrix:	SOIL						
Page:	Method:	Totals:	#d	%d-ratio	#t	#s	%s-ratio
1	BTEX by P&T	3	0	0%	0	0	0%
- 1	Volatile TPH by P&T (vTPI))	3	0	0%	0	0	0%
2	Petroleum Hydrocarbons (TPH)	3	0	49%	0	0	0%
3	Organochlorine Pesticides (OC)	8	ı	13%	0	ı	13%
5	Organophosphorus Pesticides	8	ι	13%	0	- 1	13%
7	Acid extractable metals (M7)	12	2	17%	0	1	8%
10	Acid extractable mercury	12	2	17%	0	- 1	8%
18	Moisture	12	_			-	
Matrix:	WATER						
Page:	Method:	Totals:	#d	%d-ratio	#L	Ns	‱-ratio
12	Filtered mercury	14	2	i4%	0	1	796
14	Filtered metals	14	2	14%	0	- 1	796

NEPC guideline for laboratory duplicates is 1 in 10 samples (10%). USEPA guideline for laboratory matrix spikes is 1 in 20 samples (3%).

Cover Page 4 of 4

Laboratory Report: E022211

ADDITIONAL COMMENTS SPECIFIC TO THIS REPORT

A. Report re-issued with Lab #20336 analysed and reported for TPH, BTEX, metals as per client instructions, refer to reissued sample receipt notice. Lab #20336 was extracted outside THT for TPH, BTEX analysis, sample was kept refrigerated prior to analysis.

ry QAQC Self Assessment data shall relate specifically to this report, and may only provide an indication of sample result quality, one of this Self Assessment certificate does not proclude any requirement for a QAQC review by a secredised contaminated size EPA



Laboratory Report No:

E022211

Central West Envirotech

0507DR - May assorted

Page: 3 of 18 plus cover page

of Analysis

Contact Name: Client Reference James Milson

Date: 21/6/05

This report supercedes reports issued on: 3/6/05

	Cilent Ret	erence						eport supercedes	The state of the s			
Laborato	ry Identification		20338	20339	20340	20341	20342	20343	20344	20345	20338d	20338r
Sample Id	entification		0513GSA	0513GSB	0513GSC	0513GSD	0513GSE	0513GSF	0513GSG	0513GSH	QC	QC
Depth (m)			0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15		
	Date recorded on COC		31/3/05	31/3/05	31/3/05	31/3/05	31/3/05	31/3/05	31/3/05	31/3/05		
	y Extraction (Preparation) Date		28/5/05	28/5/05	28/5/05	28/5/05	28/5/05	28/5/05	28/5/05	28/5/05	28/5/05	
Laborator	y Analysis Date		31/5/05	31/5/05	31/5/05	31/5/05	31/5/05	31/5/05	31/5/05	31/5/05	31/5/05	
Method	Organochlorine Pesticides (OC)	EQL										
E013.2	a-BHC	0.05	<0.05	< 0.05	<0,05	<0.05	< 0.05	< 0.05	<0.05	<0.05	< 0.05	
	нсв	0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.05	< 0.05	<0.05	<0.05	< 0.05	
	ь-внс	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
	g-BHC (Lindane)	0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.05	<0.05	<0.05	
	d-BHC	0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.05	<0.05	< 0.05	
	Heptachlor	0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	<0.05	<0.05	<0.05	< 0.05	
	Aldrin	0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	
	Heptachlor epoxide	0.05	< 0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	
	trans-chlordane	0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	<0.05	<0.05	<0.05	< 0.05	••
	Endosulfan i	0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	<0.05	<0.05	< 0.05	< 0.05	
	cis-chlordane	0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	
	Dieldrin	0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.05	<0.05	< 0.05	
	4,4-DDE	0.05	1.1	0.66	1.3	1.0	1.1	0.83	0.87	0.91	1.1	0.0%
	Endrin	0.05	<0.05	< 0.05	<0.05	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	
	Endosulfan II	0.05	< 0.05	< 0.05	< 0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	
	4,4-DDD	0.05	0.09	0.07	0.14	0,1	0.15	0.09	0.1	0.08	0.09	0.0%
	Endosulfan sulphate	0.05	<0.05	<0.05	<0.05	< 0.05	<0.05	< 0.05	<0.05	<0.05	< 0.05	
	4,4-DDT	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	< 0.2	
	Methoxychlor	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	DBC (Surr @ 0.2mg kg)]	88%	84%	95%	93%	95%	93%	96%	93%	83%	6%

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E013.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/dual ECD.

LabMark Pty Ltd ABN 27 079 798 397 SYDNEY: Unit 1, 8 Leighton Place Asquith NSW 2077 Telephone: (02) 9476 6533 Fax: (02) 9476 8219 MELBOURNE: 116 Moray Street, South Melbourne VIC 3205 Telephone: (03) 9686 8344 Fax: (03) 9685 7344



Laboratory Report No:

E022211

Page: 4 of 18

Client Name:

Central West Envirotech

plus cover page

Certificate of Analysis

Contact Name:

James Milson

Date: 21/6/05

0507DR - May assorted Client Reference This report supercedes reports issued on: 3/6/05 Laboratory Identification 20339 lcs m þ Sample Identification QC QC QC Depth (m) Sampling Date recorded on COC Laboratory Extraction (Preparation) Date 28/5/05 28/5/05 28/5/05 Laboratory Analysis Date 31/5/05 30/5/05 30/5/05 Method Organochlorine Pesticides (OC) **EQL** a-BHC E013.2 0.05 97% 107% < 0.05 HCB 0.05 118% < 0.05 ь-внс 0.05 97% 102% <0.05 g-BHC (Lindane) 0.05 96% 105% <0.05 d-BHC 0.05 101% 98% <0.05 Heptachlor 105% 0.05 87% < 0.05 0.05 100% 104% <0.05 Aldrin Heptachlor epoxide 0.05 102% 106% <0.05 trans-chlordane 0.05 102% 107% <0.05 Endosulfan I 0.05 102% 107% < 0.05 cis-chlordane 0.05 100% 105% < 0.05 Dieldrin 0.05 99% 104% <0.05 4.4-DDE 0.05 105% <0.05 113% 103% Endrin 0.05 < 0.05 Endosulfan II 0.05 105% 108% <0.05 4,4-DDD 0.05 117% 100% <0.05 Endosulfan sulphate 4,4-DDT 0.05 94% 108% < 0.05 0.2 75% 103% < 0.2 0.2 Methoxychlor 100% 111% < 0.2 DBC (Surr @ 0.2mg/kg) 86% 100% 113%

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E013.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/dual ECD.



Laboratory Report No:

E022211

Central West Envirotech

James Milson

Page: 5 of 18 plus cover page

Final

Certificates

Contact Name: Client Reference

0507DR - May assorted

Date: 21/6/05

ort supercedes	reports issued on:	3/6/05

- 3	Chem Re	terente		- MG / DIC - IVI	15 masorica			opon supervouc	s rébours resued o	a. Silvos	: 961 830 900 99	Name of Street of Party of Street, Str
Laborato	ry Identification		20338	20339	20340	20341	20342	20343	20344	20345	20338d	20338r
Sample Id	entification		0513GSA	0513GSB	0513GSC	0513GSD	0513GSE	0513GSF	0513GSG	0513GSH	QC	QC
Depth (m)	Date recorded on COC		0.15 31/3/05	0.15 31/3/05	0.15 31/3/05	0.15 31/3/05	0.15	0.15	0.15	0.15		
	Extraction (Preparation) Date		28/5/05	28/5/05	28/5/05	28/5/05	31/3/05	31/3/05	31/3/05	31/3/05		
	Analysis Date		30/5/05	30/5/05	30/5/05	30/5/05	28/5/05 30/5/05	28/5/05 30/5/05	28/5/05 30/5/05	28/5/05 30/5/05	28/5/05 30/5/05	
Method	Organophosphorus Pesticides	EQL										
E014.2	Dichlorvos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Mevinphos (Phosdrin)	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<u> </u>
	Demeton (total)	1	<1	<1	 <	<1	< 1	<1	<1	<1	<1	
	Ethoprop	0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	<0.5	<0.5	<0.5	l <u></u>
	Monocrotophos	0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	<0.5	<0.5	
	Phorate	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	
	Dimethoate	0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5	
	Diazinon	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Disulfoton	0.5	<0.5	<0.5	<0,5	<0.5	<0.5	< 0.5	<0.5	<0,5	<0.5	
	Methyl parathion	0.5	<0.5	<0.5	<0.5	<0.5	<0,5	<0.5	<0.5	<0.5	<0,5	
	Ronnel	0.5	<0.5	· <0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	
	Fenitrothion	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Malathion	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Fenthion	0.5	<0.5	<0.5	<0.5	<0,5	<0.5	< 0.5	< 0.5	<0.5	<0.5	
	Chlorpyrifos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	
	Parathion	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	
	Stirofos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	
	Prothiofos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Azinophos methyl	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Cournaphos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	TPP (Surr @ 2mg/kg)]	103%	99%	105%	114%	102%	104%	116%	107%	99%	4%

LabMark Pty Ltd: ABN 27 079 798 397 SYDNEY: Unit 1, 8 Leighton Place Asquith NSW 2077 Telephone: (02) 9476 6533 Fax: (02) 9476 8219 MELBOURNE: 116 Moray Street, South Melbourne VTC 3205 Telephone: (03) 9686 8344 Fax: (03) 9686 7344

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E014.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/FPD/MS.

Laboratory Report No:

E022211

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Final

Client Name: Contact Name: Central West Envirotech

plus cover page

Certificate of Analysis

Office D. f.

James Milson

Date: 21/6/05

This report supercedes reports issued on: 3/6/0

	Client Re	ference	C)507DR - M	ay assorted		This	report supercede	s reports issued o	n: 3/6/05	7850	and the second s
Laborato	ry Identification		20339s	les	mb							
Sample to	entification		QC	QC	QC							
Depth (m)	1											
Sampling	Date recorded on COC											
Laborator	y Extraction (Preparation) Date		28/5/05	28/5/05	28/5/05		***				 	
Laborator	y Analysis Date		30/5/05	30/5/05	30/5/05					ļ		
Method	Organophosphorus Pesticides	EQL										- ***
E014.2	Dichlorvos	0.5	104%	102%	<0.5							
	Mevinphos (Phosdrin)	0,5			< 0.5				1			
	Demeton (total)	1	!	l	<1							
	Ethoprop	0.5	98%	91%	<0.5				1			
	Monocrotophos	0.5	102%	94%	<0.5				ì			
	Phorate	0.5	100%	92%	<0.5	1			i		1	
	Dimethoate	0.5	109%	94%	<0.5						!	
	Diazinon	0,5	102%	93%	<0.5	1				l	i .	
	Disulfoton	0.5	101%	95%	<0.5	1 1				1		
	Methyl parathion	0,5	99%	89%	<0.5	1				1		
	Ronnel	0.5	89%	87%	< 0.5					l		
	Fenitrothion	0.5	104%	102%	<0.5	i I				l		
	Malathion	0.5	86%	77%	<0.5				1	l		
	Fenthion	0.5	106%	98%	<0.5				1	l		
	Chlorpyrifos	0.5	101%	96%	<0.5	1				l		
	Parathion	0.5	101%	96%	<0.5	l 1				l	i I	
	Stirofos	0.5	102%	95%	<0.5	l [l	!	
	Prothiofos	0.5	107%	103%	<0.5	[}				l		
	Azinophos methyl	0.5	127%	94%	<0.5	[l		
	Coumaphos	0.5	111%	102%	<0.5	l l				l	i	
	TPP (Surr @ 2mg/kg)		102%	99%	103%					l	1	

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E014.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/FPD/MS.



Laboratory Report No:

Contact Name:

Client Reference

Votest Naple://rotech Central West Envirotech

0507DR - May assorted

James Milson

Page: 7 of 18 plus cover page

Date: 21/6/05

This report supercedes reports issued on: 3/6/05

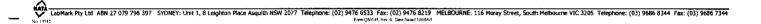
Certificate of Analysis

Laborato	ry Identification		20334	20335	20336	20337	20338	20339	20340	20341	20342	20343
Sample Ide	entification		0512GS-01	0512GS-14	0521DW-05	052975-01	0513GSA	0513GSB	0513GSC	0513GSD	0513GSE	0513GSF
Depth (m)			2.6 24/3/05	2.6	1.8		0.15	0.15	0.15	0.15	0.15	0.15
	Date recorded on COC Extraction (Preparation) Date		1/6/05	24/3/05 1/6/05	16/6/05	23/5/05 1/6/05	31/3/05 1/6/05	31/3/05 1/6/05	31/3/05 1/6/05	31/3/05 1/6/05	31/3/05 1/6/05	31/3/05 1/6/05
	Analysis Date		1/6/05	1/6/05	19/6/05	1/6/05	2/6/05	2/6/05	2/6/05	1/6/05	1/6/05	1/6/05
Method	Acid extractable metals (M7)	EQL										
E022.2	Arsenic	1 1	l.	<i< td=""><td>2</td><td>5</td><td>1</td><td><1</td><td><1</td><td>2</td><td><1</td><td><1</td></i<>	2	5	1	<1	<1	2	<1	<1
	Cadmium	0.1	<0.1	<0.1	0.1	0.9	0.1	0.1	0.2	0.1	0.1	0.1
	Chromium	1 1	6.	8	15	54200	13	7	8	11	16	16
	Copper	2	5	5	11	12000	88	66	99	88	49	55
	Nickel	1	7	10	3	37	3	2	3	3	6	4
	Lead	2	8	11	15	64	10	9	10	12	9	8
	Zinc	5	7	35	49	2770	13	10	15	15	10	11

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E022.2: 0.5g digested in nitrie/hydrochloric acid. Analysis by ICP-MS.





Laboratory Report No:

E022211

Central West Envirotech

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Final

plus cover page

Certificate

Client Name: Contact Name:

James Milson

Date: 21/6/05

of Analysis

Chart Deference

0507DR - May assorted

This report supercedes reports issued on: 3/6/05

	Chent Re	егепсе	U	OUTDR - ME	iy assorted		21115	opon supercours	o reports issued o	ii, broros	C.C.E.MAN	er in the constitution of
Laborato	ry Identification		20344	20345	20338d	20338r	20345d	20345r	20339s	crm	crm	les
Sample Id	entification		0513GSG	0513GSH	QC	QC	QC	QC	QC	QC	QC	QC
Depth (m)			0.15	0,15								
	Date recorded on COC		31/3/05	31/3/05		**						**
Laborator	Extraction (Preparation) Date		1/6/05	1/6/05	1/6/05		1/6/05		1/6/05	1/6/05	16/6/05	1/6/05
Laboratory	/ Analysis Date		1/6/05	1/6/05	2/6/05		1/6/05		2/6/05	1/6/05	17/6/05	1/6/05
Method	Acid extractable metals (M7)	EQL										
E022.2	Arsenic)	<1	<1	1	0%	<1		80%	109%	94%	107%
	Cadmium	0.1	0.1	<0.1	0.1	0.0%	<0.1		93%	91%	92%	93%
l	Chromium	1	7	6	11	17%	5	18%	73%	91%	92%	101%
1	Copper	2	46	43	91	3%	45	5%	#	96%	90%	103%
1	Nickel	3	5	2	3	0%	1	67%	78%	92%	84%	104%
	Lead	2	10	7	10	0%	7	0%	95%	i01%	93%	100%
	Zinc	5	18	9	13	0%	8	12%	80%	87%	83%	101%

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E022.2: 0.5g digested in nitrie/hydrochloric acid. Analysis by ICP-MS.



Laboratory Report No: West Layirotech

Central West Envirotech

Page: 9 of 18 plus cover page

Certificate of Analysis

Contact Name:

James Milson

Date: 21/6/05

	Client Re	eference	0	507DR - M:	ay assorted	This	report supercede	s reports issued o	on: 3/6/05	100	
Laborato	y Identification	********************	les	mb	mb		1				<u> </u>
Sample 1d	entification		QC	QC	QC						
Depth (m) Sampling	Date recorded on COC			 							
Laboratory	Extraction (Preparation) Date Analysis Date		16/6/05 17/6/05	1/6/05 1/6/05	16/6/05 17/6/05		· · · · · ·				
Method	Acid extractable metals (M7)	EQL									
E022.2	Arsenic	1	94%	<1	< }						
	Cadmium	0.1	102%	<0.1	< 0.1						ŀ
	Chromium	1	102%	<1	<1]	ļ	
	Copper	2	92%	<2	<2				ł	1	
	Nickel	i	93%	<1	<1			į.	j	i	
	Lead	2	94%	<2	<2		Į.	ļ	1	1	
	Zinc	5	103%	<5	<5					Ì	

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E022.2: 0.5g digested in nitric/hydrochloric acid. Analysis by ICP-MS.

LabMark Pty Ltd ABN 27 079 798 397 SYDNEY: Unit 1, 8 Leighton Place Asquith NSW 2077 Telephone: (02) 9476 6533 Fax: (02) 9476 8219 MELBOURNE: 116 Moray Street, South Melbourne vIC 3205 Telephone: (03) 9686 8344 Fax: (03) 9686 7344



Laboratory Report No:

E022211

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Client Name:

Central West Envirotech

plus cover page

Certificate

James Milson

Contact Name:

Date: 21/6/05

of Analysis

Client Reference

0507DR - May assorted This report supercedes reports issued on: 3/6/05 Laboratory Identification 20335 20339 20340 20341 20334 20336 20337 20338 20342 20343 Sample Identification 0512GS-01 0512GS-14 0521DW-05 052975-01 0513GSA 0513GSB 0513GSC 0513GSD 0513GSE 0513GSF 2.6 2.6 0.15 0.15 0.15 Depth (m) 1.8 0.15 0.15 0.15 Sampling Date recorded on COC 24/3/05 24/3/05 21/5/05 23/5/05 31/3/05 31/3/05 31/3/05 31/3/05 31/3/05 1/6/05 31/3/05 Laboratory Extraction (Preparation) Date 1/6/05 1/6/05 1/6/05 Laboratory Analysis Date 1/6/05 1/6/05 17/6/05 2/6/05 2/6/05 2/6/05 2/6/05 1/6/05 1/6/05 1/6/05 EQL Acid extractable mercury Method 0.10 <0.05 <0.05 E026.2 0.05 < 0.05 < 0.05 *<0.3 < 0.05 < 0.05 < 0.05 < 0.05

Results expressed in mg/kg dry weight unless otherwise specified

Comments: *EQL increased due to matrix interference.

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.

Laborator	y Identification		20344	20345	20338d	20338г	20345d	20345т	20339s	erm	erm	les
Sample 1de	entification		0513GSG	0513GSH	QC	QC						
Depth (m)			0,15	0.15								
Sampling I	Date recorded on COC		31/3/05	31/3/05			1 1	l		:		
Laboratory	Extraction (Preparation) Date		1/6/05	1/6/05	1/6/05		1/6/05		1/6/05	1/6/05	16/6/05	1/6/05
Laboratory Analysis Date			1/6/05	1/6/05	2/6/05		1/6/05	1	2/6/05	1/6/05	16/6/05	1/6/05
Method	Acid extractable mercury	EQL	,									
E026.2	E026.2 Mercury 0.05			<0.05	< 0.05		< 0.05		98%	102%	121%	88%

Results expressed in mg/kg dry weight unless otherwise specified

Comments: *EQL increased due to matrix interference.

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.



Laboratory Report No: Versit Namevirotech

E022211

Central West Envirotech

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CertificateS of Analysis

Contact Name: Client Reference James Milson

Date: 21/6/05

Clie	nt Reference	0	507DR - M	ay assorted	This report superced	es reports issued on: 3/6/05	
y Identification		lcs	mb	mb			
ntification		QC	QC	QC			
		. 					
		16/6/05 16/6/05	1/6/05 1/6/05	16/6/05 16/6/05			
Acid extractable mercury Mercury	EQL 0.05	99%	<0.05	<0.05			
	y Identification entification Date recorded on COC Extraction (Preparation) Date Analysis Date Acid extractable mercury	Client Reference y Identification Entification Date recorded on COC Extraction (Preparation) Date Analysis Date Acid extractable mercury EQL	Client Reference Column Column	Client Reference 0507DR - M.	Client Reference 0507/DR - May assorted	Client Reference	Client Reference

Results expressed in mg/kg dry weight unless otherwise specified

Comments: *EQL increased due to matrix interference.

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.

LabMark Pty Ltd. ABN 27 079 798 397 SYDNEY: Unit 1, 8 Leighton Place Asquith NSW 2077 Telephone: (02) 9476 6533 Fax: (02) 9476 8219 MELBOURNE: 116 Moray Street, South Melbourne VIC 3205 Telephone: (03) 9686 8344 Fax: (03) 9686 7344



Laboratory Report No:

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Client Name:

Central West Envirotech

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Certificate

Contact Name:

James Milson

of Analysis

0507DR - May assorted

Date: 21/6/05

		Client Refer	ence	0	507DR - Ma	y assorted		This	report supercede:	reports issued o	n: 3/6/05	- 1996	
Laborato	ry Identification			20320	20321	20322	20323	20324	20325	20326	20327	20328	20329
Sample Ide	entification			0507RD01	0507RD02	0507RD03	0507RD04	0507RD05	0507RD06	0507RD07	0523RD01	0523RD02	0523RD03
Depth (m)													
	Date recorded on COC			31/1/05	31/1/05	31/1/05	31/1/05	31/1/05	31/1/05	31/1/05	4/5/05	4/5/05	4/5/05
Laboratory	Extraction (Preparation)	Date		27/5/05	27/5/05	27/5/05	27/5/05	27/5/05	27/5/05	27/5/05	27/5/05	27/5/05	27/5/05
Laboratory	Analysis Date			30/5/05	30/5/05	30/5/05	30/5/05	30/5/05	30/5/05	30/5/05	30/5/05	30/5/05	30/5/05
Method	Filtered mercury	ĺ	EQL										
E026.1	Mercury		0.1	<0.1	1.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1,5	1

Results expressed in ug/l unless otherwise specified

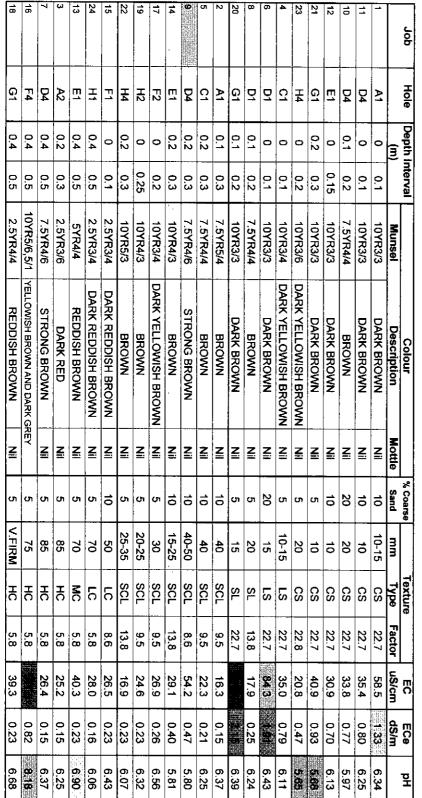
E026.1: Analysis by CV-ICP-MS or FIMS following BrCl pre-treatment.

Laborato	ry Identification		20330	20331	20332	20333	20320d	20320r	20330d	20330r	20321s	lcs
Sample Id	entification		0523RD04	0523RD05	0523RD06	0523RD07	QC	QC	QC	QC	QC	QC
Depth (m)											<u></u>	
Sampling	Date recorded on COC		4/5/05	4/5/05	4/5/05	4/5/05						
Laboratory	Extraction (Preparation) Date		27/5/05	27/5/05	27/5/05	27/5/05	27/5/05		27/5/05		27/5/05	27/5/05
Laboratory	Laboratory Analysis Date			30/5/05	30/5/05	30/5/05	30/5/05		30/5/05		30/5/05	30/5/05
Method	Filtered mercury	EQL										
E026.1	026.1 Mercury 0.			<0.1	<0.1	<0.1	<0.1		<0.1		97%	89%

Results expressed in ug/l unless otherwise specified

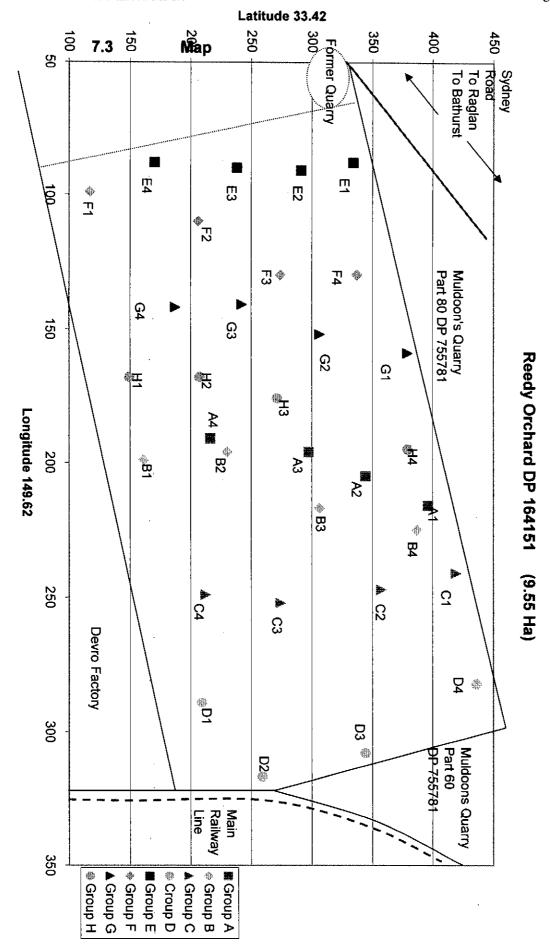
E026.1: Analysis by CV-ICP-MS or FIMS following BrCl pre-treatment,

7.2 Field GPS and Physicochemical Data





				CLS								Grade
heavy clay	medium clay	light medium clay	light clay	clay loam sandy	clay loam	sandy clay loam	Loam	sandy loam	clayey sand	loamy sand	sand	Туре
>75	>75	75	50-75	40-50	40-50	25-40	25	15-25	5-15	5	<u>⊇</u> .	THE
50	45-55	40-45	35-40	30-35	30-35	20-30	25	10-20	5-10	رت ن	<u> </u>	% Clay
5.8	5.8	7.5	8.6	8.6	8.6	9.5	9.5	13.8	22.7	22.7	22.7	Factor





Site Investigation Log KELSO NSW

IaE	central we		Reedy's Orch	ard	
Job		Date		Test Pit/Bore ID	
N D D D D T	0513GS	31 -M a	r-05	A1	
Locatio	on Description		ge e astalabah can		
	east side of orcha	ard slightly south o	f midline		
GPS	Lattitude or Northing	Longitude o	r Easting	Altitude (m)	
	33.42216	149.62	2396	691	
â	Texture, colour, aggregate (% & mm), m	noisture (d, m,w)	PID (ppm IBE)	Sample Code	
0.1	Dark brown Fine Sandy	Loam			0.1
0.2	Orange and dull grey k	oam			☐ _{0.2}
F					_
0.3	Weathered granite -dusty	orange	on annuamment of the constitution of the const	Strage Realization States and Advance Spinish	0.3
0.4					0.4
					6.6.1 6.6.1 6.6.1 6.6.1
0.5					0.5
0.6					Ο.6
3.5					
3.5					3.5
4.0	al Observations				4.0
	Skeleton Weed, Pa			gerbringsbergeren bleef	
	Ordicion Weed, Fr	attersons Ourse, V	viid Tulliip		



b		Date		hard Test Pit/Bore ID	5
Jane	0513GS	31-Ma	r-05	A2	
cation					
_TANKS	centre east, si	ghtly south - top o	f ridge		
PS	Lattitude for Northing	Longitude o	r Easting	Altitude (m)	(0)
	33.42205	149.62		695.4	
m .	Texture, colour, aggregate (% & mm), n	noisture (d, m,w)	PID (ppm IBE	Sample Code	
٠.		* , , .			
1 .	Dark Brown Sandy Lo	am			_ \$55-
\Box	Brownish Red Sandy Clay	Loam			H
<u> </u>					Ш
* .					
3	Weathered granite, heavy	=			85- 88-97 88-97
	coarse grained silica s	and			200 L
					<i>******</i>
4					
5					
356					廿
					Н
)		adam es Sudera de los			
5.5					
			S I SPEED ON PROPERTY		
.0					
nerai	•bservations			tilitika pysta os tertir	Widing
	Plaintain 50%, wild turnip	30% couch and	nanic grass 20	%	
	i idilitaar 0070, waa turiib	oo 70, couch and	Janic grass 20	/0	
	Shallow soil pro	ofile to weathered	granite		
			•		



		central west	Reedy's (Orchard
Job		Date		Test Pit/Bore ID
	0513GS		31-Mar-05	A3
ocation Description		Sapitation and the continues of the cont	5-(1	each assessment and restriction beginning to the death of the first of the

0513GS		31-Ma	r-05	A3		
cation Description and infiling and an infiling state of particles and appropriate value of the control of the						
·s [centra Lattitude or Northing	al, top of ridge,			_	
				Altitude (m)	1	
,	33.42196 Texture, colour, aggregate (% & mm), m	149.62	297 PID (ppm IBE)	697.4 Sample Code	ĺ	
333	(// 3 ////////////////////////////////	olocaro (a, m,w)	/ ID (ppii IBE)	Cample Code	116	
	Dark Brown Sandy Loa	am				
\Box	-				Ħ-	
Ħ	Hard agglomerated clay loam/wea	thered granite			\Box	
1011	in a tol. Discours a saying to be a real state of the saying the saying saying the saying saying saying saying	Charles and the same very account				
	Weathered red and white o	granite				
795 795						
21.16 21.16						
18.1 19.53						
					e1.1 85.1	
195						
654						
200	erika kan kerengan peringan peringan besar bahan besar bahan besar berangan besar bahan besar bahan berangan b Mangan persegan bahan peringan besar bahan peringan besar bahan berangan besar bahan berangan besar bahan bera			jednikalim daj salaga Borotakalim da koji SSS suurwalim da kalaga	n in Sel	
200 200					860 392	
.5					1868 1845	
				Argyfeddiod Llafed Saethiol o fel oedd		
.0						
neral	Observations			Magazin da		
skeleton weed						
SKOICIOIT WCCC						
red soil, granite at 0.2 m						



b	E N V I r O t e C central w	⊇ST Date	Reedy's Orch	ard Test Pit/Bore ID	
	0513GS	31-M	ar-05	A4	
cation			rapidate in 1974 en est		
8	Cen: Lattitude of Northing	tral north west		77 - 27 - 17 - 17 - 17 - 17 - 17 - 17 -	
97000		Longitude		Allittle (m)	
,	33.42191 Texture, colour, aggregate (% & mm), n	149.6	2216 PID (ppm IBE)	697.4 Sample Code	ı
	Total Control of Contr	iolature (d, m,w)	T ID (ppiil IBL)	Sample Code	
	Dark Brown Sandy Lo	am			
					110-
Ħ	Dark brown Sandy Clay	Loam			Ⅎ
					#
\Box					7
	Red Heavy Clay with Weather	red granite		. F	3_
	real really stay man real sta	ed granne			:: ::::::::::::::::::::::::::::::::::
				ingly (i) k	1001
					4 (0) 3 (4)
538					
5					(1) (3)
0					
pola 1	Disenvations	ukokuu soomaa soo ka 176 ya Bark	n programme (Personal Colonia de C		a di kati
	skeleton	weed, wild turnip)		
		d arenite -100			
	weathere	d granite at 0.3m	+		



b		Date	Reedy's Orch	Test Pit/Bore ID	
	0513GS	31-Ma	ır-05	B1	
cation	n Description				
	Central v	vest side of orchar	d		
S	East the control of t	Longitude	r Easting	Altitude (m)	
	33.42199	149.62	2161	697.4	
า	Texture, colour, aggregate (% & mm), r	noisture (d, m,w)	PID (ppm IBE)	Sample Code	
	Dark Brown Fine Sandy Cl	ay Loam			
\pm					FI.
	Brown Sandy Clay Lo	am			Ħ
		·			
	Hard Brown Sandy C	lay			
	,	•			
_	Brown Sandy Clay Loam and Wea	athered Granite			
H	, ,				Ħ.
	Red Weathered Granite, Heavy Clay	with Brown Mottle			Ħ
13818				i. National ang kang pangkan	
.63143 .52143					100
1999 1141 1148					44) 8.8
(K9)					ener! Eran
8:50 3:30 3:11					
31:25°					
2016 1785					
5					
960 960					37. 200
o					H
	Observations		if the constant of the constan	Asserbance and Commence and Comme	ini Dalahini
245 (1997)				ing with a section for the first fill the first fill.	haacka
	Skeleton weed 15%, wild t	urnip 70%, Phalris	5%, Plantain 10)%	
					



KELSO NSW

	central w		eedy's Orch	ard		
Job		Date		Test Pit/Bore ID		_
	0513GS	31-Mar	-05	B2		
ocation	Description is a least and a least a least and a least					
	Central w	est side of orchard				
SPS	atilitice of Northing	Longitude or	Easting	Altitude (m)		_
	33.42096	149.622	230	697.4		
m	Texture, colour, aggregate (% & mm), n	noisture (d, m,w)	PID (ppm IBE)	Sample Code		m
	Doub Brown Conduit 11					
).1	Dark Brown Sandy Loam - H	ard Setting				0.
	Dark Reddish BrownHeavy Clay/W	eathered Granite			H	
).2	Dark Roadion Brown reavy Clay/VV	camerea Granite			Ħ	0.
					H	_
).3 =					\Box	^
7. 3	Moist at 0.3 m	000000000000000000000000000000000000000	Philipp District Commission (Color)	waing on account and		0.
285 166 167						
).4						0.4
0.5					H	0.
tion in						
0.6					H	0.
100 g		ndon agamman orangsa sa tangsa ses Salah sababah aga lagi dan balanga				
3.5						3.
						<u> </u>
4.0						
	Observations	aritaristaturistatistatoren 15 etak. Apitariak (18 jalioka etaka etak.	karatiatoi valuutaosi. Segendossa teessa see			4.
	Skeleton Weed, W	Vild Turnip, Patterso	n's Curse			_
				 		
						_



Site Investigation Log KELSO NSW

Date Test Pit/Bore ID 0513GS 31-Mar-05 B3 Central west side of orchard GPS Lattitude or Northing Longitude or Easting Allitude (m) 33.42217 149.62306 701.3 Texture, colour, aggregate (% & mm), moisture (d, m,w) PID (ppm IBE) Sample Code Dull Yellowish Brown Clay Loam Ochre Heavy Clay overlying Weathered Granite 0.2 Ochre Heavy Clay overlying Weathered Granite 0.3 Seneral Observations Skeleton Weed, Wild Turnip, Patterson's Curse	
Central west side of orchard SPS Lattitude or Northing Longitude or Easting Altitude (m) 33.42217 149.62306 701.3 Texture, colour, aggregate (% & mm), moisture (d, m,w) PID (ppm IBE) Sample Code Dull Yellowish Brown Clay Loam Ochre Heavy Clay overlying Weathered Granite Ochre Heavy Clay overlying Weathered Granite 3.5 7 3.5 7 4.0 8 Description	
Central west side of orchard Latitude or Northing Longitude or Easting Altitude (m) 33.42217 149.62306 701.3 Texture, colour, aggregate (% & mm), moisture (d, m,w) PID (ppm IBE) Sample Code Dull Yellowish Brown Clay Loam Ochre Heavy Clay overlying Weathered Granite 2 3.3 4.4 A.5 Color of the device of the sample	
Attitude or Northing Longitude or Easting Attitude (m) 33.42217 149.62306 701.3 Texture, colour, aggregate (% & mm), moisture (d, m,w) PID (ppm IBE) Sample Code Dull Yellowish Brown Clay Loam Ochre Heavy Clay overlying Weathered Granite Ochre Heavy Clay overlying Weathered Granite	<u> </u>
33.42217 149.62306 701.3 Texture, colour, aggregate (% & mm), moisture (d, m,w) PID (ppm IBE) Sample Code Dull Yellowish Brown Clay Loam Ochre Heavy Clay overlying Weathered Granite	
Texture, colour, aggregate (% & mm), moisture (d, m,w) Dull Yellowish Brown Clay Loam Ochre Heavy Clay overlying Weathered Granite	
Dull Yellowish Brown Clay Loam Ochre Heavy Clay overlying Weathered Granite	
Ochre Heavy Clay overlying Weathered Granite	
Ochre Heavy Clay overlying Weathered Granite	
5. The second of	
	A
5.5 one of the second of the s	Ħ.
5.5 one of the second of the s	H
5. Servations	
5 or a Coservations	
5 or a Coservations	107) 1031
5.5 is a service of the control of t	
5.5 The second of the second o	1 d 1331
5. The second of	
5 oneral Observations	A
.0 Diservations	
.0 Observations	(47) (48)
.0 Diservations	etica etica etica
neral Observations	273
néral Observations	artes altes
Skeleton Weed Wild Turnin, Patterson's Curse	
ekeleten vveed, vviid Tamip, Takerson's Odrse	
soloth soil	



KELSO NSW

	central we		leedy's Orch	ard	
Job		Date		Test Pit/Bore ID	
	0513GS	31 -M ar		B4	
ccation	Description (4) Season of the special of the season of the		grafficarsenda 1936 sur-	entingende de loger (trais) de	A, Mr. E
	South ea	ast side of orchard			
SPS		Longitude or	Easting	Altitude (m)	
	33.42225	149.62	387	701.3	
m	Texture, colour, aggregate (% & mm), n	noisture (d, m,w)	PID (ppm IBE)	Sample Code	m
:: . · ·	Medium Brown hards sandy	alay laam			665 655
.1	Medibili Brown hards sandy	ciay loam			0.
H	Dull Brown and Ochre Hard Clay W	eathered Granite			H
.2 🎞		Garrier Granico			H o.
\Box					H
.з 🖁					Η,
					<u> </u>
Ħ					Ħ
.4				Respons per in the setty sever	0.
047 1443					100
.5			Lagrandian sa		0.
3187 3187					20 M (2.10)
.6					 0.
368 338					544 574
3.5					
3.3				ragunas propessos de la Parricha de la calenda	3.
335 335					
4.0	Observations				4.
Am Maha distant				<u>Jacobski distribusioni distribulita</u>	
	Skeleton Weed, W	/ild Turnip, Patterso	n's Curse		



KELSO NSW

Nest Reedy's Orchard

Job	central w	est F IDate	Reedy's Orch	ard Test Pit/Bore ID	
	0513GS	31-Ma	r-05	C1	
ocation	Description				
		ast side of orchard			
:PS	Lattituse on Northing	Longitude o	r Easting	Altitude (m)	
m	33.42241 Texture, colour, aggregate (% & mm), n	149.62	2419 PID (ppm IBE)	702 Sample Code	m
	rexture, colour, aggregate (% drillin), ii	loistate (d, m,w)	PID (ppill IBL)	Gampie Code	<u>"</u>
	Dark Brown Fine Sandy Clay Loar	n - Hard setting			Ĺ
1				25	0
ͺH	Bleached Brown Sandy Clay Loar	n Hard Setting			╡.
	Middler,, b				-
Ħ					=
3	Bleached Ochre Sandy Cla	y Loam			(
	Hard setting powdery over weat	hered granite		\$77	500 45
4			70 H249544550505070028450290		9
NA Sui					
5					1
6					(
866					. i
3.5	្តីក្រុម នៅក្នុង មុខការប្រជាជនជាតិ ដើម្បីបានប្រជាជនជាការប្រជាជនជាការប្រជាជនជាការប្រជាជនជាការប្រជាជនជាការប្រជាជ ការប្រជាជនជាការប្រជាជនជាការប្រជាជនជាការប្រជាជនជាការប្រជាជនជាការប្រជាជនជាការប្រជាជនជាការប្រជាជនជាការប្រជាជនជាកា				3
4.0			Berling brising		1
eneral	Observations				
	Wild turnip 80%, Phalaris 5%, S	Skeleton Weed 5%	Couch 5% Bron	nus 5%	
-					



Site Investigation Log KELSO NSW

	central w		eedy's Orch	ard	
Job		Date		Test Pit/Bore ID	
	0513GS 31-M		-05	B2	
Location	ocation Description				
	Central w	vest side of orchard			
GPS	Lating of North Designation	Longitude or	Easting	Altitude (m)	
	33.42096	149.622	230	697.4	
m	Texture, colour, aggregate (% & mm), r	noisture (d, m,w)	PID (ppm IBE)	Sample Code	m
	Dod Draw Conductors 11	10.4			
0.1	Dark Brown Sandy Loam - H	ard Setting			0.1
	Dark Reddish BrownHeavy Clay/W	eathered Granite			
0.2	Dank readistriblewin leavy Glayive	Cathorea Granite			Ħ 0.2
		· <u></u>			H
l, E					Ħ.,
0.3	Moist at 0.3 m				0.3
189 31: 2					
0.4					0.4
657 8.7					
0.5					0.5
8.78					
0.6					H 0.6
100				dise Djira y Cili a Lakar	
3.5		- Pergerak di Strek bergintan. Pergerak bergintan di Station di Station			3.5
3.3		en e			
411					
4.0 Genera	I Observations				4.0
ander Minis pu	ментельности по при	nerusen ikini iblimir berginen iriki bibibib	nnem mika kirkiki kirikini kiriki i	grapite er och med vikike i Set X (Si Si)	geografic endering
	Skeleton Weed, W	Vild Turnip, Patterso	n's Curse		



Site Investigation Log KELSO NSW

	ral west	Reedy's Orch	ard		
Job	Date		Test Pit/Bore ID		
0513GS	31-Ma	ır-05	В3		
ocation. Description					
Ce	ntral west side of orchar	d			
GPS	Longitude o	r Easting	Attitude (m)		
33.42217	149.62	2306	701.3		
m Texture, colour, aggregate (% &	mm), moisture (d, m,w)	PID (ppm IBE)	Sample Code	m	
988 888				31933 31833	
Dull Yellowish Brow	n Clay Loam			– o.	
Ochre Heavy Clay overlying	g Weathered Granite			Ħ	
0.2				<u> </u>	
Ħ				Ħ	
0.3 Herrichter von Schalbergerichter von Schalbergerichter von der Schalbergerichte von der Schalbergerichter von der Schalbergerichter von der Schalbergerichter von der Schalbergerichter von der Schalbergerichte von der Schalbergerichter von der Schalbergerichter von der Schalbergerichter von der Schalbergerichter von der Schalbergerichte von der Schalbergerichter von der Schalbergerichter von der Schalbergerichter von der Schalbergerichter von der Schalbergerichte von der Schalbergerichter von der Schalbergerichter von der Schalbergerichter von der Schalbergerichte von de	268889888888888888888888888888888	THE REPORT OF THE PROPERTY OF THE PARTY OF T	nin maanaanaaneessa	. 0.	
0.4				0.	
0.5		amerikan ang		= 0.	
				H	
0.6				Ħ.	
	Egonaly, jesklig (1965), som det i i i Pletogggggggeste i som det af stelebybet, i st			0.	
3.5				3.	
				. 14: 14:	
4.0					
General Observations				4.	
Skeleton Weed, Wild Turnip, Patterson's Curse					
soloth soil					
	SOIDHT SUII				



ገ V	irotech	NEEGO 14344
	central west	Reedy's Orchard
	Date	Test Pit/Bo

Job		Date		Test Pit/Bore ID					
0513GS Location Description		31-Mar-05		B4					
Locati		ast side of orchard	<u>Reminerate eta esperiora </u>	ersections explored and accompany					
GPS	Latitude or Northing	Longitude or	Easting	Altitude (m)					
m	33.42225 Texture, colour, aggregate (% & mm), m	149.62387 oisture (d, m,w) PID (ppm IBE)		701.3 Sample Code					
	rexidie, colour, aggregate (76 & mm), m	ioistare (a, m,w)	FID (ppin (BE)	Sample Code	m E				
0.1	Medium Brown hards sandy	Medium Brown hards sandy clay loam			0.1				
9.1	Dull Brown and Ochre Hard Clay W	actioned Cresite			- 0.1				
0.2	- Dui Brown and Ochre Hard Clay W	eathered Granite			0.2				
0.3					0.3				
	=								
0.4					0.4				
2					2				
0.5					0.5				
0.6					0.6				
3.5					3.5				
J.J %					3.5				
4.0					4.0				
Gener	al Observations		e chreck abraham in more						
Skeleton Weed, Wild Turnip, Patterson's Curse									
				· · · · · · · · · · · · · · · · · · ·					



KELSO NSW

	central w		Reedy's Orch	laru	
Jop		Date		Test Pit/Bore ID	
0513GS		31-Mar-05		C1	
cocanor	Description			processors and a comme	ud Millioda Historia
	South e	ast side of orchard			
GPS	estucko o Rodnij	Longitude o	r Easting	Altitude (m)	
	33.42241	149.62		702	
m	Texture, colour, aggregate (% & mm), r	noisture (d, m,w)	PID (ppm IBE)	Sample Code	m
					MAGA Magana Magana
0.1	Dark Brown Fine Sandy Clay Loai	m - Hard setting			0.
	Bleached Brown Sandy Clay Loa	m Hard Setting			Ħ
0.2		<u>.</u>			0.1
ΙĦ					Ħ
0.3	Disasted Octor Oct 1 Ct		_		Ħ ₀.;
\$ A	Bleached Ochre Sandy Cla		_		9.72 8.43
	Hard setting powdery over weat	nered granite			
0.4					0.
(31) (31)					ot.
0.5					П о.
::9% 56.			e Siringalproprisa (77.5 79.54
0.6					
0.0					0.0
(5) e (6) e					
3.5					3.
334 334					3-14 2011
4.0					4.
	Observations			L Erdasinaposki sudibil	/::I
<u> </u>	Wild turnip 80%, Phalaris 5%, S	Skeleton Weed 5%	Couch 5% Bron	nus 5%	



KELSO NSW

	central w		Reedy's Orch	ard	
Job		Date		Test Pit/Bore ID	
	0513GS	31-M	ar-05	C2	
Location					3. 1974 1974 V
GPS		uth east side		N DIA SANA PANA MANA MANA	
Gr G	Latitude of Northing			Altitude (m)	
m l	33.42247 Texture, colour, aggregate (% & mm), n	149.6	2357 PID (ppm IBE)	703 Sample Code	
	rexture, colour, aggregate (76 & mm), m	ioisture (u, m,w)	PID (pprii IBE)	Sample Code	m
	Medium Brown Fine Sandy C	Clay Loam			737 737 77
0.1					0.
Н	Brown Hard setting Sandy C	lay Loam			\exists
0.2					0.
H	Dad Harry Olevery Name				Ħ
0.3	Red Heavy Clay over Weathe	red Granite			a .
36					9386 747
0.4					= 0.
2000 2000					
0.5	en an en				- 0.
388					<u> </u>
0.6					
0.6					0.
55					
3.5					3.
4.0					4.
General	Observations			inichtiowielencial	
	Wild turnip 80%, Ske	eleton Weed 15%	Bromus 5%		
		1.00 (0.00, -0.00)			
	Red weath	ered granite at 0.2	2 m		
	<u> </u>				



KELSO NSW

Reedy's Orchard Job Test Pit/Bore ID 0513GS 31-Mar-05 C3 Location Description South central west side - gully

Longitude or Easting Lattitude or Northing Altitude (m) 694.<u>7</u> 33.42252 <u>149.62</u>274 | PID (ppm IBE) Texture, colour, aggregate (% & mm), moisture (d, m,w) Sample Code m Dark Grey Brown Sandy Clay Loam 0.1 0.1 Brown Hard setting Sandy Clay Loam 0.2 0.2 Weathered granite 0.3 Large quartz granules - coarse sand - sandy clay 0.4 0.5 0.5 0.6 0.6 3.5 3.5 4.0 4.0 Skeleton Weed, Wild Turnip, "Bottle washers"



KELSO NSW

west Reedy's Orchard

	central w		Reedy's Orch	<u>ard</u>	
Job		Date		Test Pit/Bore ID	
	0513GS	31-Ma	ar-05	C4	
Location Des					
	So	othwest side			
GPS		Longitude o	or Easting	Altitude (m)	
	33.42249	149.62	2212	700.1	
m	Texture, colour, aggregate (% & mm), n	noisture (d, m,w)	PID (ppm IBE)	Sample Code	m
.* .					0.54
0.1	Dark Brown Fine Sandy Cla	ay Loam			0.
	11 10 11 5 11				
=	Hard Setting Dull Brown Sandy				Ħ
0.2	/Weathered granite	<u> </u>			0.2
	Open de Olev AM estie				
0.3	Sandy Clay/Weathered C	Franite	_		0.3
	Ochre Sandy Clay, Weathere	nd Cranita	_		
0.4	Ochre Sandy Clay, Weathers	eu Granite			
					0.4
					5.50 5.00
0.5			is alian physics at the		0.5
0.6					Ħ 0.6
			Granding and		
3.5					
3.3					3.5
4.0					4 (
General Obse	n xations				
	Skeleton Weed 10%, Wild Turi	nip 80% Dock 2%	Couch and Kiki	ıvu 8%	
				- <u>y</u>	
	* ************************************				
			•		



KELSO NSW

ecn tral west Reedv's Orchard

	<u>central w</u>		leedy's Orch	ard	
Job		Date		Test Pit/Bore ID	
	0513GS	31-Mar		D1	
ocation Description					
	Opposite Devo aer	obic Ponds - South	west side		
ei PS	SHIUGE OF NORTING	Longitude or	Easting	Altitude (m)	ě
	33.42289	149.622	209	702.2	
m Te	xture, colour, aggregate (% & mm), n	noisture (d, m,w)	PID (ppm IBE)	Sample Code	l m

).1	Dark Brown Fine Sandy Cla	ay Loam			0
	lard Setting Dull Brown Sandy				Ħ
.2 -	/Weathered granite)			<u> </u>
	Red Weathered Gran	nito			
).3	Neu Weathereu Gran		-		0
.4 ⁼					Ħ。
					T 14
).5					0
).6					H 0
3.5					Нз
				SECTION CONTRACTOR	
4.0	Allen de Carlos de la companya de l Ontre la companya de				<u> 4</u>
			10010011001110111111111111111111111111	worth the second	unneennee
	Skeleton Weed 10%, Wild Tur	nip 80% Dock 2% (Couch and Kiku	ıyu 8%	
		 -			
	•				
					1



ob	central w	Date	Reedy's Orch	Test Pit/Bore ID	
	0513GS	31-Ma	ar-05	D2	
cation	Description				211
	South size	de near railway lin	•		
PS	Lattitude or Northing	Longitude	or Easting	Altitude (m)	
	· · · · · · · · · · · · · · · · · · ·				
ո	33.42317 Texture, colour, aggregate (% & mm), n	149.6	2259 PID (ppm IBE)	702.2 Sample Code	
	romato, soloal, aggiogate (70 a min), n	noistare (u, m,w)	TID (ppin IBL)	Sample Code	yr.
	Dark Brown Fine Sandy Cla	av Loam			age di Samuel
	Dank Brown Fine Carray Ca	ay Loain	•		owe XXX
H	Dull Brown Sandy Clay Loam	with como			\exists
žН	Weathered Granite				\exists
	vveatileted Graffite				
	Poddish Provin Heavy Clay and 186	andhauad Ouauita			
3	Reddish Brown Heavy Clay and W	eathered Granite	_		
	Coarse granules	05.05.040 kasang sampa kenganggang sang 15.05.05		::::::::::::::::::::::::::::::::::::::	100
338					212
30		ing the second operation for the			
3697					
3116					
G (92)				0.00 (1.00)	
46			ur (1939) na raju ja ja ja ja ja		- 20
(3.0) (3.0)					
3612					
.5					319 341 341
94.					344 333
.88				i grande de la Mar	84.51 13.51
.0			til fra Land billion (L)		18.0} 1899
neral	Chservations				ue din
	Skeleten Wood FOW	Mild turnin 200/ E	anthonia 200/		
	Skeleton Weed 50%,	vviid turnip 20% L	аптопіа 30%		



ם ד		Date		Test Pit/Bore ID	
estional of	0513GS escription	31-Ма	ar-05	D3	
oauon (L)	· · · · · · · · · · · · · · · · · · ·	ear Part 60 DP 75		Butter Children and Children and Children	
S		E PODICIONAL DE LA CONTROL DE		Alikude (m)	
, -	33.42308 Texture, colour, aggregate (% & mm),	149.6 moisture (d. m.w)	2344 PID (ppm IBE)	702.2 Sample Code	i
	Very Dark Brown Sand				
	Dull Brown Bleached Sand	y Clay Loam			
	Ochre Weathered Gr	ranite		· · · · · · · · · · · · · · · · · · ·	
					2000 2000
5					
o le cel C le	Servations				
	Patterson Curse 25% Wild Tur				28.48
	ochres, dusty pu	rple above weather	ed granite		



	<u>central west</u> Reedy	's Orchard
	Date	Test Pit/Bore ID
0513GS	31-Mar-05	D4
21/00 Description		is/Residencesticate attributionics in acceptance of the second

				10011100000	
	0513GS	31-M	ar-05	D4	
Locatio	In Description with the state of the state o				
	Sothside ne	ar Part 60 DP 75	5781		
GPS	Leathure of Northing	Longitude	or Easting	Alitude (m)	
	33.42282	149.6	32436	702.2	
m	Texture, colour, aggregate (% & mm), m	noisture (d, m,w)	PID (ppm IBE)	Sample Code	m
	Dark Brown Fine Sandy I	Loam			
0.1					0.1
	Medium Brown Fine Sandy C	lay Loam			\exists
0.2	-				0.2
	B. 4B				
0.3	Red Brown Sandy Clay L	_oam	_		0.3
0.4	Red Clay with large coarse silic	ca granules			0.4
0.5	Red Clay /Weathered granite	granules			0.5
0.6				:	0.6
8					200.0 12.66
3.5		ieud ug ikugina gangi Malaka			3.5
2					
4.0			ing displayeras as se		H 4.0
	al Observations		ga g	Augusta jūrasi iš akti iš	
	Bromus 40%, Wild Tu	ırnip 20%, Skelet	on Weed 20%		
	Ha	and augered			
-					



1-6-	central we		Reedy's Orch	ard	
Job		Date		Test Pit/Bore ID	
	0513GS		lar-05	E1	
_ocation U	escription				
GPS	Sothside nea	ar Part 60 DP 75	5781		
ara	Eathuide of Northing	Longitude	or Easting	Aftitude (m)	
 _	33.42088	149.6	32334	694	
m see	Texture, colour, aggregate (% & mm), m	oisture (d, m,w)	PID (ppm IBE)	Sample Code	m see
58 C	Dark Brown Sandy Loa				985 196
).1	Daik Blown Gandy Loa	2111			0.
(30.0m)					\$55 \$65
0.2					Ħ ₀.;
					H
э.з 📙	Brown Clay Loam and Weather	red Granite			Ħ"
 #::					0.3
2.1					nari Hilli
0.4	Dark Brown Sandy Clay with R	ed Mottles			0.4
A de la companya de l					954 954
0.5	Red Clay /Weathered granite	granules			0.5
Н					
o.6 H	Weathered Granite				Ħ o.€
H	Tradition Of Citimo				H
,_ 					Ħ
0.7					0.7
\Box					Θ
0.8					0.8
eneral O	oservations				distances of
	Wild turnip, panic	um, feathertop -l	Danthonia		



KELSO NSW

	central we		Reedy's Orch	ard	
Job		Date		Test Pit/Bore ID	
	0513GS	31-Ma	ar-05	E2	
Location	escription:			Kolisaiseidi eta letakaki	sugaruviji.
T-1-1- MEDIUM DONO	North eas	st near Residence	es		
GPS	atituse on Londing	Langitude	or Easting	Altitude (m)	
	33.42091	149.6	2291	700	
m :	Texture, colour, aggregate (% & mm), n	noisture (d, m,w)	PID (ppm IBE)	Sample Code	m
	Very Dark Brown Sandy	Loam			2.7.
0.1	Very Dark Blown Salidy	LOam			0.1
	-				Ħ
0.2					月 0.2
0.3	Brown Clay Loam				0.3
					0.5
0.4					0.4
0.5					0.5
0.6					0.6
0.7	Red and Grey Heavy (llav			0.7
				M/N 15% (1) (1)	<u> </u>
				lagis (kilo) dagal (bila) pilas plata sakabasas	3.00 3.00 3.00
4.0 Genera O	oservations .				4.0
				nenctzetzetet (Santakisa) jozzala	nga na ang kalang k
	Feath	ertop, panicum			
	,				



)	Envirotec	Date	Reedy's Orch	Test Pit/Bore ID	
rationi	0513GS Description	31-Mar	:-05	E3	
eno();		ı central - Gully			<u>981 - 34</u>
S	Latitude of Northing	Longitude or	Easting	Altitude (m)	
,	33.4209 Texture, colour, aggregate (% & mm), m	149.62 noisture (d, m,w)	238 PID (ppm IBE)	700 Sample Code	r
	Dark Brown Coarse Sand	y Loam			
	Brown Sandy Clay Loa	am			
_	Dark Brown Heavy Clay over Wea	thered Granite			
▋	Weathered Granite				
E283161 8VK	(Baragalishing-Tribin)=11285 TE SHADISH PROBLEM SHARING BIDGA SANASA		BDHAMBBDHAIROLAN ARABAS	7,713,14,771,14,14,14,14,14,14,14,14,14,14,14,14,14	19110
5					
o					15.1 16.1 16.2 1.40
io ai r	Doservations Bromus 40%, Wild Tu			KUNIKAN SALAKATA (SALAKA SAL	
			111000 2070		



Reedy's Orchard Job Test Pit/Bore ID 0513GS 31-Mar-05 Location Description Sothside near Part 60 DP 755781 Longitude or Easting 33.42088 149.62170 700 m Texture, colour, aggregate (% & mm), moisture (d, m,w) Sample Code m Dark Brown Sandy Loam 0.1 0.1 Brown Sandy Clay Loam 0.2 0.2 Heavy Clay/Weathered Granite, Coarse Sandy Clay 0.3 0.3 0.4 0.4 0.5 0.5 0.6 0.6 3.5 3.5



<u>b</u>	central v	Date	Reedy's Orch	Test Pit/Bore ID	
	0513GS	31-Ma	r-05	F1	
cation E	description			ASSESSED OF STREET	nion p
	Noi	th West Corner			
PS	Lattitude or Northing	Longitude o	r Easting	Altitude (m)	
	33.42099	149.62	2117	698	
m	Texture, colour, aggregate (% & mm),	moisture (d, m,w)	PID (ppm IBE)	Sample Code	<u> </u>
					1.0
1	Dark Brown Sandy L	oam			- 1
-	D				
₂ □	Brown Clay Loan	1			Ħ
<u> </u>					
	Red Weathered Gra				
3	ived weathered Gra	inite	-		
					931 148
. H				esis es appendique	inda Inda
					100
					10.5
5 74					CONT.
12.					1.6
5 =				() () () () () () () () () ()	
584 582					938 936
).7					ijis Lie
		. Ni promote grantadi Hit			
.0					30.0 30.0
W-VIEW	Servations				en fribel
		•			
		1000			



	central w		Reedy's Orch	ard	
ob		Date		Test Pit/Bore ID	
	0513GS	31-Ma		F2	
ocation I	Description	California de la companione de la compan		territoria. Territoria de la companya de la company	-
		st near Residences			
PS 🖐	Lattitude of Northing	Longitude o	r Easting	Altitude (m)	
	33.4211	149.62	206	700	
m a	Texture, colour, aggregate (% & mm), n	noisture (d, m,w)	PID (ppm IBE)	Sample Code	m
	Dark Brown Sandy Lo	am	+		8 9
1	Daik Blown Sandy Lo	diii			0
	Brown Clay Loam				‡
2					0
3	Heavy Brown Clay - Weather	ed Granite	4		c
			4		
<u> </u>					
					1.
; <u> </u>		elektrika di kiji je ji je	in the first of the forest of the second		- (
).7				-	0
-04 -55 -75					1
i.o =					4 ۲
neral (Observations				
	Danthonia Wild	Turnip and Skeleto	n Weed		
	Dandiona, VVIII	Tarrilp and Okelett	,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
			w		



Job	central w		Reedy's Orch	ard	
		Date		Test Pit/Bore ID	
ocation F	0513GS Description	31-M	1ar-05	F3	
OCAHOII-L					
SPS	Centra Lattitude or Northing	l North East side		7 010 100	
J. Y				Altitude (m)	
m -	33.42130 Texture, colour, aggregate (% & mm), r	149.0	62276 PID (ppm IBE)	700	
300 SE	resture, colour, aggregate (% & mm), r	noistare (a, m,w)	PID (ppm IBE)	Sample Code	m
2004T	Dark Brown Sandy Lo	am			ii.
.1				i i	0.
	Brown Sandy Clay Lo	am			7
.2					∃ ₀
.3					0.
		•			Ť
,	Bronze Weathered Gra	anite			
.4					0.
					=
.5		er (1915) Percusas parametras de la Victoria			0.
					4
.6] 0.
				Brenskij wala in de le Breisteren in de bes	
0.7					- 0.
4 0					1
4.0	bservations				1 4
				<u> </u>	Africa (Alabare)
	Wild Turnip, PI	antain, Patterson	's Curse		



KELSO NSW

		central we		Reedy's Orch	ard	
Job			Date		Test Pit/Bore ID	
		0513GS	31-Mar	r -0 5	F4	
Loca	ation	Description : Management in the property of the control of the con				phylogical
		No	rth east side			
GPS	S (10)	Lattituce or Northing	Longitude or	Easting	Altitude (m)	
		33.4213	149.62	337	699	
m		Texture, colour, aggregate (% & mm), m	noisture (d, m,w)	PID (ppm IBE)	Sample Code	m
	Sin					
0.1		Dull Brown hard setting San	dy Loam			0.1
<u> </u>						
Ì						
0.2						0.2
0.3		Brown Clay Loam		4		0.3
	1			-		
0.4	-					0.4
					:	
0.5		Ochre Heavy Clay with Manganese	Nodules, Moist			0.5
0.6		Yellow Ochre Weathered	Granite			0.6
0.0	mir g		Granite Nijih katang atau sa	g-regresionelphelengics		o.o
				ing property described in	rigio de la companya	
0.7	7					0.7
						13)
4.0	Ħ					4.0
		Diservations				
		PARA .				
		•				
-						
L						



Reedy's Orchard Test Pit/Bore ID 0513GS 31-Mar-05 G1 Location Description Centralk East Side near Part 80 DP 755781
Northing Lattitude or Northing Altitude (m) 33.42156 149.62379 700 Texture, colour, aggregate (% & mm), moisture (d, m,w) m Sample Code m Dark Brown Fine Sandy Loam 0.1 0.1 Brown Clay Loam 0.2 0.2 Reddish Brown Heavy Clay 0.3 0.3 0.4 0.4 **Bronze Weathered Granite** 0.5 0.5 0.6 0.6 0.7 0.7 4.0 General Observations



Job	central	West Date	Reedy's Orch	ard	
	051200		05	Test Pit/Bore ID	
.oc	0513GS	31 -M 8 2011-2011-2011-2011-2011-2011-2011-2011	1r-05 	G2	
		entral North East	and the state of t		
3PS	Lattitude or Northing	Longitude	or Easting	Altitude (m)	
	33.42152	149.62	2306	699	
m	Texture, colour, aggregate (% & mm)	, moisture (d, m,w)	PID (ppm IBE)	Sample Code	m
).1	Dark Brown Sandy L	_oam			0.
	Brown Clay Loar	 m			
0.2					<u>ه</u>
).3 __	Red Sandy Clay	у			0.
).4	Weathered Grani	ite			0.
0.5					0.
0.6					0.
0.	7				o.
4.0					4
Ser	eral Observations	kolosanegrapistekaja pestusi pestusi		ntinselinggansessesse	Managara
	Fea	athertop, panicum			
					
		*			



0513GS	Date		Test Pit/Bore ID	
051300				
	31-Ma	ar-05	G3	
on Description				
Central North We	est - Hollow with 3	pear trees		
Lattitude or Northing	Longitude o	or Easting	Altitude (m)	
33 42144	149 6	2242	699	
Texture, colour, aggregate (% & mm),	moisture (d, m,w)	PID (ppm IBE)	Sample Code	
998 Gr				
Dark Brown Sandy Lo	oam			500 500)
 Dark Brown Heavy Clay over We 	eathered Granite			\exists
				$\exists \bot$
Red and Brown Weathered G	ranite - Dusty			
	rtiniteeri oleksi tiikitiid kii kaleksi liinaa. Markii ta kassii ka saasaa kaleksi ka kaleksi ka	iba di mada ani ani ati sebua. Ngangan		
			in ferre given a single of the	Н.
				Н
24 발전 : 1 12 pro - Terres 한 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Principalita (1964) e Principalita (1964). Bekara karanta kalibatan Bibbilia da mara	iyin (gerêk dede bi birê li iliye. Bir (Moda Karistin de de bir bir ke		Ħ
	strádukrátás (patrokisturás) Pojáros krátásásásásásás			\perp
rall Observations				
80% Brom	ous grass, 3 Pear T	rees		
,	Soloth soil			
	Central North Ward Lattitude or Northing 33.42144 Texture, colour, aggregate (% & mm), Dark Brown Sandy L Dark Brown Heavy Clay over We Red and Brown Weathered G	Central North West - Hollow with 3 Lattitude or Northing Longitude 33.42144 149.6 Texture, colour, aggregate (% & mm), moisture (d, m,w) Dark Brown Sandy Loam Dark Brown Heavy Clay over Weathered Granite Red and Brown Weathered Granite - Dusty Red and Brown Weathered Granite - Dusty 80% Bromus grass, 3 Pear T	Central North West - Hollow with 3 pear trees 33.42144 Texture, colour, aggregate (% & mm), moisture (d, m,w) Dark Brown Sandy Loam Dark Brown Heavy Clay over Weathered Granite Red and Brown Weathered Granite - Dusty Red and Brown Weathered Granite - Dusty 80% Bromus grass, 3 Pear Trees	Central North West - Hollow with 3 pear trees Lattitude or Northing Longitude or Easting Altitude (m) 33.42144 149.62242 699 Texture, colour, aggregate (% & mm), moisture (d, m,w) PID (ppm IBE) Sample Code Dark Brown Sandy Loam Dark Brown Heavy Clay over Weathered Granite Red and Brown Weathered Granite - Dusty Red and Brown Weathered Granite - Dusty 80% Bromus grass, 3 Pear Trees



KELSO NSW

ob .	central w	Date	Reedy's Orch	Test Pit/Bore ID		
0513GS Ocation Description		31-	Mar-05	G4		_
Cation						
PS I	Nor Lattitude or Northing	rth West Side	e or Easting	[Altitude (m)	9	_
	33.42142	i				
m -	Texture, colour, aggregate (% & mm), n	i 149. noisture (d, m,w)	.62187 PID (ppm IBE)	700 Sample Code	┨	n
### ###					986 982	_
1000 1000 1000	Dark Brown Fine Sandy Cla	ay Loam				(
					277762	
	granules				H	
				<u> </u>		
	Red Heavy Clay/ Weathered	d Granite				
3	Tiod Hodry Glay, Fredition	u Oranio				(
	Red and Bronze weathered	I Granite				
4						(
253					H	
5 日					H	(
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s H					H	(
				And the second of the second o	H	<u> </u>
. . .		parison (Coving in Arle Title as year (Coving in Arle)			H	
).7					В	(
					Н	
.0		dag penglajakan			Н	4



Reedy's Orchard Test Pit/Bore ID 31-Mar-05 0513GS H1 Location Description Central North West Side Longitude or Easting 33.42167 149.62149 695 Texture, colour, aggregate (% & mm), moisture (d, m,w) PID (ppm IBE) Sample Code m Brown Sandy Loam 0.1 0.1 Red Heavy Clay 0.2 0.2 Red weathered Granite MOIST 0.3 0.3 0.4 0.4 0.5 0.5 0.6 0.6 0.7 0.7



KELSO NSW

central west Reedy's Orchard

Job		Date	ccay 3 Oron	Test Pit/Bore ID	
Locat	0513GS ion Description	31-Mar-05		H2	
LOGAL		eth Most video to			····
GPS	Lattitude or Northing	orth West - ridge to Longitude of	Easting	Altitude (m)	
	33.42168	149.62		694	
m	Texture, colour, aggregate (% & mm), m	oisture (d, m,w)	PID (ppm IBE)	Sample Code	m
0.1	Brown Fine Sandy Loa	am			0.1
	Reddish Brown Heavy Cla	av and			
0.2	Golden and Red Weathered				□ 0.2
0.3					0.3
0.4		.			0.4
0.5	Bronze and red weathered	Granite			0.5
0.6					0.6
0.7					0.7
4.0					4.0
Gene	ral Observations				
	Very	Little Topsoil			
<u> </u>					



ob	central w	est R TDate	eedy's Orch	nard	
Ųυ			·	Test Pit/Bore ID	
inantiami	0513GS	31-Mar		H3	
ocation	Description				
		entral North			
PS = §		Longitude or	Easting	Altitude (m)	
	33.42176	149.622	271	700	
m	Texture, colour, aggregate (% & mm), r	noisture (d, m,w)	PID (ppm IBE)	Sample Code	n
\$5%1 \$75.1					
.1	Dark Brown Sandy Clay	Loam			
	Reddish Brown Clay L	oam			H
.2					<u> </u>
з 📗	Red Heavy Clay and Weather				
_	Excavator hit 0.075 m diam white				-
	Water was pH 6.3, EC 312	2 uS/cm		+	
4					(
.5					
.6					
0.7	Red and Grey Heavy (Clav			d
					<u> </u>
					Ħ
4.0	Doservations	GOVERNMENT HER BELLEVIEW TO SEE THE		stantin eta	<u> </u>
**************************************		<u> 1965 (68) ministra eta eta eta eta eta eta eta eta eta et</u>		<u> </u>	
	Wild turn	nip, skeleton Weed			
	Plumber turne water off at main	next to residence or	Sydney Road	d at 14:45	



	central w		Reedy's Orch	ard		
Job		Date		Test Pit/Bore ID		
	0513GS	31-Ma	ar-05	H4		
Loca	tion Description				:	
	Cer	ntral East Side				
GPS	Latitude or Northing	Longitud e	or Easting	Altitude (m)	П	
	33.42195	149.6	2379	699		
m	Texture, colour, aggregate (% & mm), r	moisture (d, m,w)	PID (ppm IBE)	Sample Code	乚	m
	Prince Control of the				360	
0.1	Medium Brown Sandy I	Loam			4.80 4.80	0.1
						<u> </u>
	Bleached Brown Clay Loar				Ħ	
0.2	Powdery with some Fe-Mn	Nodules			ᆸ	0.2
0.3		на времения из уденными ста		gros ligisa yaq — indi in		0.3
		regreeder dat it toolde abyt Britiste in teacher fan de besk		Distriction (1986) May April 1986	П	
0.4					В	0.4
0.4					日	0.4
					H	
0.5					Ħ	0.5
					H	
0.6				Barratan Barratan seria	H	0.6
					H	
0.7						0.7
0.7						0.7
					H	
4.0					Н	4.0
Gene					39582	42513
	Soft Brome, Wuild	Turnip 70%, Love	grass 15%			
	Pale blea	ched dull brown s	oil			
	,					