

*COPY A*

OPEN FILE

Queensland  
LIBRARY  
Department of Mines

RECORD 1985/44

OPAL MINING IN THE LONGREACH-WINTON REGION, JUNE 1985

by

N.J. Krosch

CONTENTS

|                         | Page |
|-------------------------|------|
| SUMMARY                 | 1    |
| INTRODUCTION            | 1    |
| MINE INSPECTIONS        | 2    |
| Woodstock Holding       | 2    |
| Mayfair-Chiltern Hills  | 2    |
| Franklin Holding        | 3    |
| Brighton Downs          | 4    |
| Opalton Field           | 4    |
| Opalton-Vergemont Area  | 5    |
| Mayneside Area          | 6    |
| Lark Quarry             | 6    |
| Other Areas Not Visited | 7    |
| CONCLUSION              | 7    |

## SUMMARY

The winning of opal in Western Queensland has in the past decade spread from the relatively well-known areas of opal occurrence to more remote and in some cases previously unknown deposits. Extensive mining has taken place on Woodstock, Mayfair and Chiltern Hills Holdings near Middleton, and to the south on Franklin, Brighton Downs and Mount Windsor. Still further southwest, a major opal find on Kurran Holding was accompanied by large-scale mining by two parties. To the east, in the Elvo-Mayneside-Tonkoro-Vergemont-Opalton region, current activity is quite high and is expected to increase further if rumours of additional parties about to arrive from South Australia prove true. There are also many past workings in this region about which little is known by this Department, some never having been inspected by personnel from either the Geological Survey or Mining Divisions. Opal prices are high at present, but offsetting this advantage are the difficulty and high cost of locating new deposits.

Keywords: Gemstones, opal, ironstone concretions, mines, Queensland.

## INTRODUCTION

In company with Mr W. Elrick, Inspecting Officer of Mines, Rockhampton, field inspections of opal mining operations in the Winton-Longreach region were undertaken during the period 23rd June to 1st July 1985. The Longreach and Winton Mining Wardens (Mr K. Flick, S.M. and Mr K. Liddell, respectively) and Police officers from Longreach (Det. Sgt R. Dryden and Const. M. Scott) were present for most of the period whilst police officers from Winton (Sgt B. Nunan and Const. M. Hayes) and National Parks and Wildlife officers from Mount Isa (Mr G. Thomas and Mr T. Munro) participated in the first three days of the inspection. Mr B. McGaw of the Cartographic Branch, Mines Department, Brisbane was unexpectedly met at Opalton where he was holidaying with his family and he spent two days with Mr Elrick and myself field checking mine locations and map data in the Opalton-Mayneside-Vergemont area.

This inspection provided an opportunity to visit and record extensive recent prospecting and mining in the northern section of the western Queensland opal fields in areas where opal deposits have been largely unworked until recent years. Over the past five or six years considerable mining activity has occurred, and although at present there is a slight lull, this is expected to be only temporary. Several areas of extensive recent mining could not be inspected because of their remoteness and limitations on time and fuel supplies.

2.

MINE INSPECTIONS

Woodstock Holding

Mr G. Doktor was the only prospector operating on Woodstock Holding, southeast of Middleton. Access is via a road which turns south from the Winton-Boulia Highway some 8 km west of Woodstock Homestead. This road proceeds southerly for 27 km, parallel to and on the eastern side of Cadell Creek, to a tank where a westerly track branches off and proceeds a further 6 km to Mr Doktor's camp, crossing Cadell Creek en route. Several small areas of open-cut workings are located within 2 km of the camp, but the main area of workings is reported to be some 15 km north-westerly in the vicinity of "The Sisters". Mr Doktor was reluctant to disclose specific details of this locality because of his desire to keep the area concealed from other miners. Time did not permit an inspection.

The workings nearest the camp comprise four dozer cuts up to 2.5 m deep. These expose pink to red, fine-grained, cross-bedded feldspathic sandstone, with fine white claystone laminae and some thicker claystone interbeds. A thin ironstone seam lies within one such claystone interbed. In one cut, a boulder level at about 1 m depth lies at or just above a sandstone-claystone interface. Weathered and broken ironstone boulder concretions litter much of the surrounding ground surface. Evidence of opalisation is meagre. These cuts were not excavated by Mr Doktor but by earlier miners in the area.

Recent workings excavated by Mr Doktor lie about 1 km west of the camp. Here a shallow cut has exposed pink sandstone with ferruginous boulders consisting of weakly to strongly cemented sandstone (sandstone boulders). Again numerous remnants of weathered, broken sandstone boulders cover this low undulating ground and some floaters contain patch or rarely flecks of good colour.

Mr Doktor holds no current mining tenure but stated that if he found something in his prospecting cuts he would peg a Mining Claim.

Mayfair-Chiltern Hills

At least three locations have been mined in the Mayfair-Chiltern Hills area.

The largest workings are about 16 km from Mayfair homestead and are estimated to be located between Opal and Magoffin Creeks. Although there is no current mining activity nor machinery on site, extensive recent workings cover a total area some 30 ha and several other cuts are located in the close vicinity. Old shallow workings have been opened

3.

up by means of dozer cuts, the largest of which is some 60 m long, 15 m wide and 4-5 m deep. Several miners have worked in this area in recent years, namely G. Doktor, P. Doroshenko, M. Bunderla, J. Piffare, and J. & P. Jenkins. The workings have exposed brown sandstone overlying approximately 300 mm of white to yellow claystone. A reddish zone 300 mm thick lies at the top of a brown to yellow sandstone underlying the clay. Rare boulders are present in the upper sandstone and an ironstone band and gypsum veins are present at the flat-lying sandstone-claystone interface. Little evidence of opal was seen, but the extent of the workings suggests some opal must have been recovered. No current tenure is held over these workings.

To the east, estimated to be in the vicinity of Punch Creek, two Mining Claims are held by J. and P. Jenkins. These are near the old camp of P. Doroshenko who was reportedly responsible for excavating a large number of shallow cuts in this vicinity within an area of some 20 ha. No current mining is in progress and the area was deserted. A small quantity of potch and colour was seen on dumps.

Several kilometres further east, intensive mining has resulted in the excavation of numerous cuts within an area of about two square kilometres. Potch was evident in ironstone concretionary boulders left at an old camp site.

#### Franklin Holding

Two sets of workings are known on Franklin Holding.

The land holder, Mr T. Cluff, is known to have mined opal in the past and has recently submitted a Mining Claim application. Time was not available for any inspection of these workings.

Workings calculated to be some 4 to 5 km west-northwest of Franklin Homestead are held under Mining Claim (MC 284, Winton) by P. Burton and are being mined by J. Cody. In this area, a large number of closely-spaced backhoe/excavator pits have been dug in an area of 100 m by 100 m, to maximum depths of 4 m. Several shallow cuts had previously been excavated on this site. Sandstone/ironstone boulders are irregularly distributed through a sequence of pink-yellow-buff, clayey, fine-grained sandstone with rare claystone interbeds and lenses. The boulders are mainly of the sandstone type, and some show minor potch.

A Mining Claim about 500 m distant had been prospected by two 3 m deep backhoe prospecting pits.

#### Brighton Downs

A partnership of A. Kent and P. Doroshenko is in the initial stages of excavating a large cut at the end of one of a group of mesas on Footscray Outstation, part of Brighton Downs Holding. The mine is known as Boot Hill, a name also given by the miners to the topographic feature being exploited. The workings are held under six Mining Claims, which are themselves covered by ML 134, Winton. Doroshenko and Kent began mining here several months ago after prospecting in the area for a year or two. Some good opal has already been recovered and indications are that this may be a most productive mine. Depending on opal production, the operators forecast a mine life of between 2 and 6 years. Even with operating costs of approximately \$1200 per week (fuel \$900-\$1000, provisions and incidentals \$200-\$300), the miners have admitted making 'moderate profits' to date.

The mesa has been worked by two benches but the face and floor of the lower cut were covered with material pushed from the upper bench at the time of inspection. The floor of the lower cut was reportedly some 10 m below the floor of the upper. The height of the face of the upper bench was about 12 m and the top of the mesa was approximately 15 m above that. A silcrete capping about 5 m thick crowns the mesa and is underlain by interbedded sandstone and claystone. The sequence exposed in the face of the top cut consists of pink sandstone underlain by about 500 mm of white claystone which grades downwards into pink sandstone again. A second white clay layer containing a distinct ironstone band underlies the sandstone and overlies sandstone with interbeds comprising fine laminae of sandstone and claystone. Within the sandstone below the second clay layer are rare ferruginous pipes, some displaying very minor potch. In the face of the lower cut (obscured by scree), it was reported that 1 to 2 m of pink sandstone overlies a clay layer incorporating a level of ironstone boulders containing abundant potch and some colour. The clay layer/boulder level traces a channel structure and boulders in the base of the channel are more heavily opalised, particularly on their undersides. Pink sandstone again underlies this level and near the base of the cut face a level of pipes and 'pancakes' (very flat ironstone boulder concretions) is reportedly exposed.

Another miner (Plumb) is reported to be working northwest of No. 5 Bore on Footscray and some 15 km north of Boot Hill, but time did not permit an inspection of this area.

#### Opalton Field

Several miners have resided semi-permanently in the immediate vicinity of Opalton for some years and have worked mines at Opalton and in the surrounding district.

5.

These include W. Linek, A. Grotjahn and D. Batinic. In addition, two parties of tourist miners were found working within the Opalton Restricted Area; T. Sullen and wife and I. Abramovic and wife.

T. Sullen was working with hand tools (pick, shovel and screen) at Opalton, near Grotjahn's old camp. Nearby, I. Abramovic was using a Kubota 4-wheel drive machine (about the size of a ride-on mower), fitted with hydraulically operated rippers and bucket, to excavate the loose rubble material which was then put through a small vibrating screen. Mr Abramovic was informed by Mr Elrick that the Kubota could not be used within the Opalton Restricted Area.

W. Linek was not at his camp when visited and was reported to be working elsewhere on the field. D. Batinic was not contacted, but his name appears on pegs marking what appears to be a Claim application, just outside the boundary of the Restricted Area. The pegs were also marked with Miner's Right numbers MR 81006 and MR 81080. Within the area enclosed by the pegs is a shaft with an automatic-tipping quick winch over it. A. Grotjahn is presently sinking a shaft near his old camp, within the Opalton Restricted Area. This shaft was about 1.5 m deep and in pink sandstone when inspected. Grotjahn has also been involved in a partnership with Dr Leigh Wallman (now deceased) during which time large open-cut workings were excavated at the southern edge of the Opalton Restricted Area, probably on Grotjahn's Mining Leases. Two underground mines have also been worked in this area. One shaft equipped with an automatic quick winch had 10 m of drives at 15 m depth and another shaft serviced with a windlass was 10 m deep.

#### Opalton-Vergemont Area

South and west of Opalton, several parties are currently active and numerous diggings have been excavated in recent years. R. Wright, assisted by G. Franklin, is prospecting in the 'Devil Devil' area, near Rocky Creek west of Opalton. Along the access track to Wright's camp, which turns westerly from the Opalton-Mayneside road, are numerous back-hoe opened up pits by G. Marton near his old camp. From Wright's camp a track loops back to Opalton and there are reported to be old workings at several locations along it. Also in this vicinity, J. Hinds is working the Gypsum Mine. To the south of Wright's camp is a group of relatively large cuts known as the Shincracker area which was mined by Dr L. Wallman.

Just south of the Opalton-Mayneside road crossing of Opal Creek, claims are held by M. Jelancich (nicknamed 'Tessler'). A caterpillar D7 dozer was on site and very extensive workings comprising numerous dozer cuts have been excavated in an area of about

6.

5 square kilometres. Some very attractive specimens of matrix opal were noted at 'Tesslers' camp. About 1 km to the southeast is the camp of U. Grosse who has bulldozed several cuts further south along the Mayneside road. G. Marton and S. Curran whose camps are in this general vicinity are working together with a D9 dozer at a location about 10 km northeast of Grosse's camp in the headwaters of Opal Creek. Some patch and minor colour were noted in fragments of ironstone concretions on the surface and a small quantity of matrix has been obtained from the cuts so far. Workings are a maximum of 6 m deep and there are 6 to 8 cuts in an area of about 4 ha.

#### Mayneside Area

Southeast of Mayneside at the Cragg Boulder Mine, Mining Claims are held by V. Evert (MCs 115, 116) and G. Mitchell (MCs 120, 121, 123, 124), and a Mining Lease encompassing the area is held jointly by the two parties. Within an area of some 4 square kilometres are very extensive dozer workings, with cuts up to 15 m deep. A D7G Caterpillar dozer was on site but the camp was unmanned when inspected.

At the Hopal Mine, south of Mayneside, Quinton Mining Ltd (manager J. Graham), known locally as 'the Canadians', have developed very extensive workings over the past couple of years. The area covered by their workings totals in excess of 4 square kilometres and the largest open cuts are 10 to 15 m deep. Two dozers, a D6 and a D7, have been used and it was suspected that siliceous cap-rock has been drilled and blasted prior to dozing, indicated by the presence of a large compressor and drill steels. Mrs Graham suggested that the company might sell the dozers and buy an excavator as a more cost-effective means of prospecting and mining. Areas around the workings have been tested extensively with a Caldwell drill.

To the west of 'Hopal', P. Burton holds Mining Claims 137, 138 and 139. Recent workings comprise several deep cuts within an area of earlier shallow dozing. Testing has also been carried out in the past with a Caldwell drill by either Mayneside Industries or Opalton Mining N.L. Burton reported that one small patch of good opal was extracted in his workings. However, results overall have been disappointing and it is likely that much of the plant (Terrex dozer and large comfortable camp) will be transferred to new operations on Franklin Holding.

#### Lark Quarry

Three Mining Claims have been pegged adjoining the western boundary of the Lark Quarry Environmental Park. No work has been undertaken on these as yet but the presence of old workings within the Environmental Park suggests that the area could have



7.

potential. It will be necessary to monitor closely any workings on these claims to guard against encroachment into the Park.

#### Other Areas Not Visited

Reports from several miners and landowners on the fields suggest that there has been much more opal mining in the region than this Department has knowledge of. Unconfirmed reports suggested that there are currently miners working on Mount Windsor Holding, and others near the Winton-Jundah road crossing of the Mayne River. Large workings east and northwest of Elvo homestead have never been visited, nor have those reported from Don East, west of Opalton. Large and reportedly very rich deposits were mined first by Dr Wallman and later by Burton on Kurran Holding. It is also suspected that some mining has been done in the Warbreccan-Connemara region.

Mr Elrick continued south to inspect mining in the Jundah area, and has reported three dozers operating on that field.

#### CONCLUSION

All indications point to a very buoyant market at present for Queensland boulder opal. Declining production from Lightning Ridge and the South Australian Fields has provided increased opportunity for the sale of Queensland opal and miners are able to readily dispose of all current production. Reports were received that a party of miners from South Australia (Christianos) is planning to move into the Opalton area, with perhaps as many as four dozers.

Against this background, however, is the apparently increasing difficulty in locating new opal deposits. Prospecting which is generally done with a dozer or backhoe is extremely expensive and, partly for that reason, much is done without the prospector taking out any form of mining or prospecting tenure.

Two aspects highlighted by this inspection are the wide distribution of opal in the region and inadequate resources for accurately locating mining areas onto base maps currently available. Limited surveying of claims and leases has been undertaken in recent years but for many areas the best maps available are 1:250 000 topographic or geological sheets prepared around 1970 or recently prepared 1:100 000 orthophoto maps drawn from air photos flown in 1970. In each case, access tracks and workings are extremely difficult to position with accuracy. New aerial photography of the whole northern opal fields region is considered of urgent priority.